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Illinois Bureau of

LABOR STATISTICS

1910.

STATE

DAVID ROSS, Secretary, SPRINGFIELD.



SPRINGFIELD, ILLINOIS:
ILLINOIS STATE JOURNAL Co., STATE PRINTERS,
1911

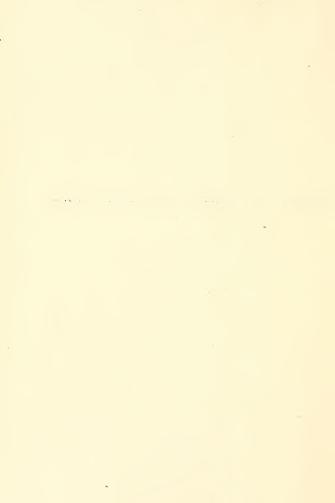
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1910.

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1910.

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1910.

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Second District,
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Third District,
John Dunlop, Peoria.

Fourth District,
Thomas Weeks, Bloomington.

Fifth District,
Thomas Moses, Westville,

Sixth District,

James Taylor, Peoria.

Seventh District, W. W. Williams, Litchfield.

 $\label{eq:continuous} Eighth\ District,$ Walton Rutledge, Alton.

Ninth District,
OSCAR CARTLIDGE, Benton.

Tenth District.
Thomas Little, Murphysboro.



STATE OF ILLINOIS.

OFFICE OF THE BUREAU OF LABOR STATISTICS, Springfield, Jan. 1, 1911.

Honorable Charles S. Deneen, Governor of Illinois:

Sn—I have the honor, on behalf of the Board of Commissioners of Labor, to submit herewith the twenty-ninth annual report of the coal industry of the State for the year ended July 1, 1910.

Very respectfully,

DAVID Ross,

Secretary.





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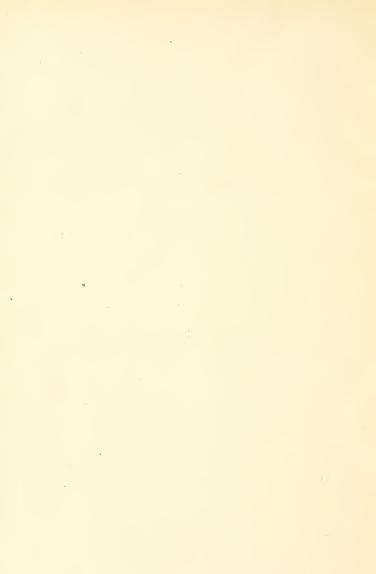
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TWENTY-NINTH ANNUAL COAL REPORT.

Statistics of Coal in Illinois for the Year Ending June 30, 1910.

Introductory.

Attention has frequently been directed to the producing capacity of coal mines of this State. In the record of mine operations presented in this year's report this feature is particularly emphasized. The shipping mines were operated but 179 days during the year. This greatly reduced working time is accounted for in part, because of the failure of the miners and operators to agree upon a wage scale in consequence of which mining was suspended from April 1 to September 9, 1910. As considerable time was necessary to get the mines in shape after the settlement, practically six months were lost, three of which are included in this report. Substantially all of the mines closed during April, May and June, excepting a few in the fifth and ninth scale districts, whose owners late in May settled on the terms proposed by the miners. Notwithstanding the suspension covered one-fourth of the present fiscal year, the total coal output was 48,717,853 tons, or, 445,857 tons less than for the year preceding, indicating how far in advance the present producing equipment is over normal market requirements. One-half of the present number of mines operating on a basis of full time could easily supply all the coal for which there is an existing market. The economic effect of two men contesting for one man's job is painfully apparent in the coal mining industry of this State, and there is everywhere evidence of the ruinous results which necessarily follow such a condition. Unfortunately the chief beneficiaries of the situation are the railroads and other great consumers who are thus enabled to name the price they pay for fuel. Everyone, except the favored interests, have regrets to express, but no one any lawful remedy to offer. It is safe to say that there is no other legitimate business interest in the State that has to such an extent been overdone, or where the margin between the actual cost on the entire production and the selling value, is so close. The prices charged local users, often considered excessive, are required in many instances it is alleged, to offset the losses sustained in large contracts.

So fierce has become this competitive war, that even the profits on local supplies are anticipated and discounted in order to keep in the business at all.

After much unnecessary travail the trade has recovered from the delusion that commercial business can be increased by reducing wages. That plan has been tried with lamentable results. As nearly everything except the element of labor cost has been lost or given away, neither the wage payer or wage receiver has anything to gain through any attempt to reduce labor values and where such attempts have been frustrated through combined action on the part of the mine workers, the effect it

would seem has proved a distinct benefit to the entire industry.

If wage reductions are to be used as an excuse for cutting prices and additional business can be secured only by offering such inducements, certainly the employer is not the gainer. As wages and other elements of real cost determines, within certain recognized competitive limits, the selling price of all commodities and, if profits are to be disregarded, and the business in a way conducted for the charitable purpose of furnishing men employment, why not make their work worth while? Why not include enough to provide not only liberal wages while employed, but a reasonable amount to cover inevitable accidents, unemployment, sickness and old age? Better that the men who risk their lives and health in the pursuit of an industry be well compensated than that the product of their labors be forced upon a glutted market and sacrificed at a value much below what it ought to bring. It is unnecessary at this time to go into a discussion of the operating causes contributing to bring about the conditions complained of. Whether the great excess of capital and labor in the business was encouraged by the anthracite strike in 1902, which, while it continued, curtailed the general coal output, widened bituminous markets and notably increased prices; whether the acquisition and development by railroad interests of immense coal areas on the pretext that it was necessary to insure an uninterrupted supply, or, whether it should be charged to the stupidity of the American Congress in refusing to amend the Sherman Anti Trust Act to authorize combinations in restraint of trade and to fix and control prices, is not now of any special importance because there should be more concern over plans for partial recovery than about conditions causing invalidity.

When the Act requiring the examination and certification of coal miners in this State became effective, it was feared in addition to the controlling influence it would give the mine workers' union, that there might result an actual scarcity of men. Whatever objections may be urged against that regulation, it cannot be said to have had the effect of curtailing the number of mine workers, for under it there has been no difficulty in securing a passport to the mines. The records of the various miners examining boards seem to show that every one who had the required fee also possessed the necessary qualifications. It is a matter of regret that its operation has not been more discriminative in its obvious purpose to elevate the standard of the service. A business loses its

distinctive character when it becomes so simple that anyone can adopt it. It requires no particular ability to drill a hole, especially with a machine, fill it with powder and delegate the danger of its discharge to some other workmen. In respect to one-half of the total coal output of the State, this is the condition to which the mining industry has descended, and in consequence the coal mines of the country have become the collecting centers for much of the indifferent, incompetent and unclassified labor of the world. The commendable motive back of the present day conservation movement is the avoidance of unnecessary waste and expense and the admittedly wasteful methods that mark much of modern mining, require that some steps be taken to prevent the continued drain upon the lives and energies of the people and the physical resources of the State. There is no sound basis for the fear expressed by some ultra-conservationists that there is any probability of an early exhaustion of fuel.

That old miser, the sun, ages ago stored away in the strata of Illinois alone enough coal to supply all the industrial wants of the United States for several hundred years to come. It is not the quantity available, but the plan of extracting what is needed for present uses that interest this generation.

In the thicker seams of coal where the room and pillar system prevails, much of it is left in the earth and a considerable per cent of what is taken out, where it is the custom to blast from the solid, is of no commercial value. It is against this form of mining that most criticism is directed, and it will be of interest to note the cost and the extent of

territory in this State to which it applies.

Out of 390, the total number of shipping mines operating this year, 225 blast coal from the solid. These exclusively solid blasting mines employed 22,731 men and produced 25,500,000 tons, or a little over onehalf of the aggregate tonnage for the State. In the production of this coal there was exploded 1,000,000 kegs of powder, 25 million pounds or 121/2 thousand tons. Each employé used about 1.100 pounds producing but a fraction over one ton for each pound of powder consumed. As to the marketable quality of the product statements vary, some asserting that fully 50 per cent is unfit for consumption. The one million kegs of powder, according to the contract rate, cost the miners \$1,750,-000, add to this the cost of 688 shot firers at \$4.00 per day, 179 days, or \$500,000, brings the total to 21/4 millions per annum. These items do not include all the expense which the using of powder involves. The record this year shows that 17 men lost their lives directly on account of powder explosions and as the statute puts a value of \$10,000 on each life, would add another \$170,000 to the cost. This is not all, as many lives are lost because of falling rock and coal loosened on account of blasting, the net expense would foot up nearly three million dollars. Is this not too high a price to pay for destroying coal and killing men? What have the miners and operators done toward changing these conditions? Beyond a few unimportant experiments with so-called safety explosives, nothing has been attempted. The question of absolutely prohibiting the use of all explosives in coal mines has never been publicly considered in this State. When the mine inspectors two years ago, recommended a law prohibiting solid blasting in entries or other narrow work, the only response came from certain mine workers criticising the effort as an attempt to increase their work without increasing their compensation. In the cause of this suggested reform it was not expected that powder manufacturers would enlist or that operators who realize considerable profit from powder sales, would become enthusiastic. practice of solid shooting in narrow work is now practically confined to Sangamon county. Other districts, if they ever permitted it, abandoned it years ago. In the table relating to solid shooting mines the extra cost to the Sangamon county miners is shown. It required 213,970 kegs of powder to produce 4,353,890 tons, while in Williamson county under similar conditions, but where the coal in all narrow work is cut, half a million tons more of coal was produced with 7,517 less kegs of powder, the purchase price of this additional powder with extra work in drilling holes and a diminished per capita product, came out of the wages of Sangamon county miners. Whether it is possible with the operation of thick coal seams and the material now available in the mines to dispense entirely with the use of explosives or substitutes therefor, may be questioned, but much of the unjustifiable waste of present methods could be immediately avoided by requiring that all coal be undercut before shooting. Where machines were not employed, this would mean a return to the lost art of pick mining and incidentally an increase in the cost thereof as it would require more time and a higher grade of skilled labor to produce coal. This would not necessarily mean a net increase in the cost of production, so much as a readjustment of present labor relations. The employment of practical miners would notably reduce the present cost of powder and other supplies; it would also reduce if not entirely dispense with the services of shot firers and the expense of many accidents, a great part of the wealth that is now diverted into these channels would find its way into the pay envelopes of the practical, competent pick man. Out of the surplus men in the mines of Illinois surely there are a sufficient number to perform the work of mining coal in the now solid shooting mines, or who, under the inducement of added compensation, would be willing to learn, considering that present demands do not require their employment for much more than one-half of the year. No more effectual check could be placed upon excess capacity and production than through the adoption of a system that would require the employment of practical, experienced men to mine coal. While the volume at rush seasons might not be so great, the quality would be better and the operations conducted in a more intelligent and workmanlike manner. The men employed at the working places of the solid shooting mines are not miners, in the sense that term should be understood, the character of their work does not confer upon them that distinction; they are at best but drillers, blasters and loaders, employments which, while calling for some physical strength, demands no special tact or ability and as a sequence American coal mines are now overcrowded with legions of mere manual laborers. It is fitting that with the general impairment of the craft, its legitimate implements should disappear. Investigators report that in the class of mines referred to the sight of a pick is a source of surprise. Once in a great while the remnants of one is discovered, but its use is chiefly confined to the unlawful practice of opening powder kegs.

Men who have come from the rank of apprentices at a time and under conditions that required some knowledge of the art of real mining, justly regret the methods through which the industry is rapidly becoming im-

paired.

If our coal resources are to be intelligently conserved, a more merchantable article produced, accidents avoided, the business put upon a higher plane, wages and profits increased, these, and other considerations, can be realized only by the abandonment of present plans with all the frightful waste and unnecessary expense they entail and the substitution therefor of a system that would encourage the employment of practical pick men and suitably reward skillful work.

From reports submitted by coal operators to the various mine inspectors, complete information is given concerning every phase of the year's business. This data is condensed in the summary and developed in the text and tables with comparisons covering a long period of mining

operations in this State.

The most notable and regretable feature is that relating to accidents, the number of fatalities being greatly increased on account of the disastrous mine fire at Cherry, Illinois, in which the lives of 256 employés were lost. As fires in mines constitute a new element of danger, a separate report presenting all the facts so far as known in that case has been issued, and forms a part of this report. Had it not been for the Cherry calamity the per cent of fatal accidents occurring from accustomed causes would have been considerably less than in many former years. Last year the total killed was 213—this year, omitting the victims of the Cherry fire, the loss was 150. Despite every reasonable precaution, accidents from causes, ordinary or otherwise, happen, and, taking one year with another, the list of dead and wounded express the aggregate units of danger created by the association of employed men plus the quantity of work performed. This is the unwritten law of accidents operating in and through all hazardous employments.

COAL IN ILLINOIS-1910.

The summary here presented embraces all of the important items represented in the report, with the same showing for the year 1909.

Summary for the Years Ended June 30, 1910 and 1909.

Classification.	1910	1909
Number of counties producing coal.	55	55
Number of mines and openings of all kinds	881	886
New mines or old mines reopened during the year	86	81
Mines closed or abandoned since last report	91	117
Total output of all mines, in tons of 2,000 pounds	48,717,893	49,163,710
Number of shipping or commercial mines	390	384
Total output of shipping mines, tons	47,225,201	47,958,562
Number of mines in local trade only	491	502
Output of local mines, tons	1,492,652	1,205,148
Total tons of mine run coal	10,220,456	8,715,759
Total tons of lump coal	20,769,930	21,680,602
Total tons of egg coal	3,334,059	3,444,612
Total tons of nut coal.	2,846,693	2,944,036
Total tons of pea coal	10,174,677	10,587,057
Total tons of slack coal	1,372,038	1,791,644
Total tons shipped	43,007,015	43,894,902
Tons supplied to locomotives at the mines	886,217	1,023,294
Tons sold to local trade	2,867,871	2,316,778
Tons consumed (or wasted) at the plant	1,956,750	1,928,736
Average days of active operation for shipping mines	179	189
Average days of active operation for all mines	171	168
Average value per ton all grades at shipping mines	\$1,016	\$1,012
Aggregate home value of total product	\$50,204,207	\$50,303,757
Average value per ton, all grades at all mines	\$1.031	\$1.023
Number of motors in use under ground	229	210
Number of mines in which machines are used	114	107
Number of mining machines in use	1,289	1,246
Number of tons undercut by machines	18,176,254	16,407,692
Number of tons mined by hand	30,541,599	32,756,018
Average number of miners employed during the year	39,069	50,834
Average number of other employés under ground	28,137	13,788
Average number of boys employed under ground	1,154	1,752
Average number of boys employed above ground	47	71

Summary—Concluded.

Classification,	1910	1909
Average number of other employés above ground	6,227	6,288
Total number of employés	74,634	72,733
Number employed at shipping mines	71,520	69,518
Number employed at local mines	31,114	3,215
Number of persons at work under ground	68,360	66,374
Number at work on surface	6,274	6,359
Average price paid per gross ton for hand mining, shipping mines	\$0.597	\$0.593
Average price paid per gross ton for machine mining	\$0.462	\$0.46
Number of kegs of powder used for blasting coal	1,254,095	1,280,607
Number of kegs of powder used for other purposes	3,128	3,963
Number of men accidently killed, 406; not including the Cherry mine victims.	150	213
Number killed inside of the mines, 395; not including the Cherry mine victims	139	199
Number killed outside of the mines	11	14
Number of wives made widows, 246; not including the Cherry mine victims	88	125
Number of children left fatherless, 675; not including the Cherry mine victims.	236	298
Number of men injured so as to lose a month or more of time	742	894
Number of gross tons mined to each life lost 120,000; not including the Cherry mine victims.	324,786	230,816
Number of employés o each life lost, 184; not including the Cherry mine victims	498	342
Number of deaths per 1,000 employed, 5.44; not including the Cherry mine victims	2.01	2.9
Number of gross tons mined to each man injured	65,657	54,993
Number of employes to each man injured	101	93
Number killed to each million tons produced, 8.3; not including the Cherry mine victims.	3.1	4,3
Number injured to 1,000 employed	9.9	10.7

This year coal is reported from 55 counties, that being the same number that reported last year, the number of mines this year is 881, which is a decrease of five from the previous year, of these 390 are shipping mines, while 491 are engaged in the local trade only.

There was an increase of 6 in the number of shipping mines this year over last, while there was a decrease of eleven in the number of local

mines.

The total product of all the mines during the year was 48,717,853 tons; this is a decrease from the previous year of 445.857 tons.

The total output of the shipping mines for this year was 47,225,201 tons or 96.94 per cent of the total product, leaving 1,492,652 tons or 3.06 per cent as the output of the local mines.

There was an increase of 1,504,697 tons in the production of mine run coal this year over last, while there was a slight decrease in all other

grades. The average number of days the shipping mines were in operation was 179 against 189 days last year, the decrease this year was largely due to the fact that a great many mines in the State did not work after April 1st on account of the strike. The aggregate value at the mines of the total product was \$50,204,207 or \$1.031 per ton; this is nearly one cent per ton higher this year than last.

The number of mines using machines for undercutting the coal was 114, this is seven more mines than reported last year. The number of machines in use was 1,289, being an increase of 43 machines over last year. The number of tons cut by machines was 18,176,254 and is

1,768,562 tons more than was cut last year.

The total number employed in and around all mines of the State was 74,634; of this number 71,520 or 95.83 per cent were employed at the shipping mines and 3,114 or 4.17 per cent were employed at local mines.

The quantity of powder used in blasting down coal in the mines is

2.07 per cent less than last year.

There were 406 men lost their lives while working at the mines during the year, this is by far the largest number ever reported for any year in the history of coal mining in Illinois.

This large loss of life was due to that appalling disaster at Cherry, Illinois, where 256 men lost their lives in that terrible mine fire.

CLASSIFICATION OF MINES.

The same order is observed here, in presenting the statistics of the coal mines of the State as followed in former reports. The two classes of mines, shipping and local, are shown separately and combined as a total for all mines.

CHANGES IN DISTRICTS.

In June 1909, the commissioners of labor made a re-apportionment of the counties comprising the first, second, third, fourth, sixth, seventh, eighth and ninth districts, viz: The county of Putnam was transferred from the third district to the first; Fulton from the fourth to the second; Logan and Menard from the sixth to the third and McLean and Tazewell from the fourth to the third; Brown, Morgan, Sangamon and Scott from the sixth to the fourth and Cass is also added to the fourth: Calhoun, Greene, Jersey, Macoupin and Montgomery from the seventh to the sixth; Bond and Madison from the eighth to the seventh and Clinton and Washington from the ninth to the seventh; Randolph from the ninth to the eighth; and Wabash is added to the ninth.

The number of mines, men and tons of each of the counties transferred can be found in the county tables of the respective districts. No

changes were made effecting the fifth and tenth districts.

Table 1 presents by districts in an abridged form the total number of mines and men and the tons of coal produced during the past year with the record of shipping and local mines shown separately. The number of all mines in the State has decreased five; the shipping mines having increased by six, and the local mines having decreased by eleven. The total tonnage has decreased about nine-tenths of 1 per cent, while the number of men employed increased about 2.5 per cent.

The number of shipping mines show an increase of six, with an increase of men and a decrease of tonnage, while the number of local mines show a decrease of mines and men and an increase of tonnage.

Table 1—Mines, Men and Tons, Shipping and Local Mines, by Districts—1910.

T		All Mir	ies.		Shippin	ng.	Local.			
Districts.	Mines.	Men.	Tons.	Mines.	Men.	Tons.	Mines.	Men.	Tons.	
First	58	7,412	3,018,246	29	7,086	2,818,570	29	326	199,676	
Second	216	8,951	3,880,765	37	8,064	3,555,007	179	887	325,758	
Third	120	5,488	2,815,979	46	4,988	2,573,305	74	500	242,674	
Fourth	108	7,255	5,210,662	31	6,875	5,076,961	77	380	133,701	
Fifth	60	6,470	3,776,768	30	6,137	3,540,393	30	333	236,375	
Sixth	37	7,146	5,862,508	27	7,069	5,834,289	10	77	28,219	
Seventh	44	7,247	5,913,722	28	7,002	5,817,192	16	245	96, 530	
Eighth	86	6,337	5,031,524	65	6,175	4,892,326	21	162	139, 198	
Ninth	73	9,360	6,632,666	49	9,279	6,612,298	24	81	20,368	
Tenth	79	8,968	6,575,013	48	8,945	6,504,860	31	123	70,153	
The State	881	74.634	48,717,853	390	71,520	47, 225, 201	491	3,114	1,492,652	

Table 2 gives the total of all mines, men and tons reduced to percentages and the same for the shipping and local mines. The shipping mines this year are only 44.27 per cent of the whole number, although they employed 95.83 per cent of the men and produced 96.94 per cent of the tonnage of the year. The local mines, while showing 55.73 per cent of the total number, only employed 4.17 per cent of the men and produced only 3.06 per cent of the tonnage, but this is a smaller per cent of men and larger per cent of tonnage than the preceding year.

Table 2—Percentages of Mines, Men and Tons, All Mines and of Shipping and Local Mines—1910.

		Percentages.								
District.		All Mines		1	Shipping			Local.		
	Mines.	Men.	Tons.	Mines.	Men.	Tons.	Mines.	Men.	Tons.	
First	6.58	9,93	6.19	50.00	95.60	93.48	50.00	4.40	6,52	
Second	24.52	11.99	7.97	17,13	90,09	91.61	82.87	9.91	8.39	
Third	13.62	7.35	5.78	38,33	90.89	91.38	61.67	9.11	8.62	
Fourth	12.26	9.72	10.70	28.70	94.76	97.43	71,30	5.24	2.57	
Fifth	6.81	8,67	7.75	50.00	94.85	93.74	50.00	5.15	6.26	
Sixth	4.20	9.58	12.03	72.97	98,92	99.52	27.03	1.08	.48	
Seventh	4.99	9.71	12.14	63,64	96.62	98,37	36,36	3.38	1.63	
Eighth	9.76	8.49	10.33	75.58	97.44	97.23	24.42	2.56	2.77	
Ninth	8.29	12.54	13.61	67.12	99.13	99.69	32.88	.87	.31	
Tenth	8,97	12.02	13.50	60,76	98.63	98.93	39.24	1.37	1.07	
The State	100.00	100.00	100.00	44.27	95.83	96.94	55.73	4.17	3.06	

Table 3 presents by districts and for the State a comparison of the whole number of mines, men and tons for the years 1909 and 1910 with the increase or decrease of each for each district. The increase or decrease of mines, men and tons as shown in the table for this year as compared with last, must not be taken as the actual opening of new mines and the closing of old ones. This is especially true of all the districts excepting the fifth and tenth for any previous year.

In the reading of this table, and all other tables where comparisons are made by districts, reference must be had to the changes of counties in all of the districts, excepting the fifth and tenth, which have been

heretofore noted.

Table 3—Mines, Men and Tons for the Years 1909 and 1910, with the Increase or Decrease, by Districts.

Districts.	,	Total—19	009,		Total—1	910.	Increase (+) or Decrease (-) For year 1910.			
	Mines.	Men.	Tons.	Mines.	Men.	Tons.	Mines,	Men.	Tons.	
First	60	7,141	3,059,813	58	7,412	3,018,246	- 2	+ 271	- 41,567	
Second	125	5,651	2,288,934	216	8,951	3,880,765	+91	+3,300	+1,591,831	
Third	100	4,399	2,268,378	120	5,488	2,815,979	+20	+1,089	+ 547,601	
Fourth	142	4,210	2,581,617	108	7,255	5,210,662	34	+3.045	+2,629,045	
Fifth	63	6,153	3,968,957	60	6,470	3,776,768	- 3	+ 317	- 192,189	
Sixth	72	8,305	5,963,260	37	7,146	5, 862, 508	35	-1,159	- 100,752	
Seventh	44	8,068	6,955,762	44	7,247	5,913,722		- 821	-1,042,040	
Eighth	99	8,914	6,789,875	86	6,337	5,031,524	13	-2,577	-1,758.351	
Ninth	101	12,028	8,733,522	73	9,360	6,632,666	-28	-2,668	-2,100,856	
Tenth	80	7,864	6, 553, 592	79	8,968	6,575,013	- 1	+1,104	+ 21,421	
The State	886	72,733	49,163,710	881	74,634	48,717,853	- 5	+1,901	- 445,857	

Table 4 presents the total tonnage of each district for four years with the increase or decrease from year to year, also the percentage of increase or decrease in tonnage this year compared with the three preceding years.

The total shows a decrease of tonnage over each preceding year, with the exception of 1908 over 1907, which shows an increase.

Table 4—Total Tons, All Mines, with Increase or Decrease in Tonnage, for Four Years, by Districts.

	19	10.	190	9	190	8.	1907	+) or (-) (1907.
Districts.	Total Tons.	Increase (+) or de- crease (—) from 1909.	Total Tons.	Increase (+) or de- crease (—) from 1908,	Total Tons.	Increase (+) or de- crease (—) from 1907.	Total Tons.	rercentage crease (+ decrease 1910 from
First	3,018,246	- 41,567	3,059,813	+ 79,585	2,980,228	-217,821	3,198,049	- 5.6
Second	3,880,765	+1,591,831	2,288,934	- 85,001	2,373,935	-273,315	2,647,250	+ 46.6
Third	2,815,979	+ 547,601	2,268,378	- 102,38€	2,370,764	+157,172	2, 213, 592	+ 27.2
Fourth	5,310,662	+2,629,045	2,581,617	+ 57,015	2,524,602	+101,436	2,423,166	+115.0
Fifth	3,776,768	- 192,189	3,968,957	+1,066,588	2,902,369	-414,684	3,317,053	+ 13,9
Sixth	5,862,508	- 100,752	5,963,260	+ 40,063	5,923,197	+145,438	5,777,759	+ 1.5
Seventh	5,913,722	1,042,040	6,955,762	281,606	7,237,368	+518,509	6,718,859	- 12.0
Eighth	5,031,524	-1,758,351	6,789,875	-1,311,388	8,101,263	- 43,937	8,145,200	- 38.2
Ninth	6,632,666	2,100,856	8,733,522	+2,439,921	6,293,601	+711,356	5,582,245	+ 18.8
Tenth	6,575,013	+ 21,421	6,553,592	2,011,533	8,565,125	+789,677	7,775,448	- 15.4
The State	48,717,853	- 445,857	19,163,710	- 108,742	49,272,452	+1,473,831	47,798,621	+ 1.9

SHIPPING AND LOCAL MINES.

Table 5 presents in condensed form the advancement of the coal mining industry in the State for the past eighteen years, showing the number of mines, men and tons for each year; at the bottom of the table will be found the increase or decrease in whole numbers and percentages compared with the year 1893 and the present year. The number of mines of all kinds have increased 11.80 per cent during the years shown, while some of the intervening years show a much larger per cent. The number of men employed have increased 39,244 or 110.89 per cent. The only years showing a decrease of men were 1896 to 1899. The increase in tons of coal produced is shown to be 144.21 per cent. Shipping mines show an increase of eighty, or 25.81 per cent in number, during the years included in the table. However, the number of this class of mines shown this year is less than for the years 1905 to 1908, inclusive, but has increased over 1909 by six mines, the number of men employed is an increase over any previous year, while the tonnage this year is a decrease from the last two preceding years, although an increase over all other years. The local mines number less

this year than for any year since 1893; the number of men employed in this class of mines is less than any year since 1900, while the tonnage is an increase over all preceding years excepting 1896.

Table 5—All Mines, Men and Tons and Shipping and Local Mines, for Eighteen Years.

Year.		Total	l.		Shippi	ng.	Local.			
	Mines.	Men.	Tons.	Mines.	Men.	Tons.	Mines.	Men.	Tons.	
1893	788	35,390	19.949,564	310	28,737	19,257,682	478	6,653	691,882	
1894	836	38,477	17,113,576	319	31,243	16,106,613	517	7,234	1,006,963	
1895	874	38,630	17,735,864	319	31,174	16,578,890	555	7,456	1,156,97	
1896	862	37,032	19,786,626	330	28,185	18,263,056	532	8,847	1,523,570	
1897	853	33,788	20,072,758	310	31,322	19,386,573	543	2,466	686,185	
1898	881	35,026	18,599,299	329	32,297	17,655,561	552	2,729	943,738	
1899	889	36,991	23,434,445	323	34,307	22,531,356	566	2,684	903,089	
1900	920	39,384	25,153,929	323	36,298	24,056,996	597	3,086	1,096,933	
1901	915	44,143	26,635.319	331	40,926	25, 526, 816	584	3,217	1,108,503	
1902	915	46,005	30,021,300	332	42,807	28,824,750	583	3,198	1,196,550	
1903	933	49,814	34,955,400	353	46,494	33,676,537	580	3,320	1,278,863	
1904	932	54,774	37,077,897	380	51,384	35,779,517	552	3,390	1,298,380	
1905	990	59,230	37,183,374	397	55,743	35,956,543	593	3,487	1,226,831	
1906	1,018	62,283	38,317,581	419	58,851	37,133,811	599	3,432	1,194,770	
1907	933	66,714	47,798,621	411	63,154	46,436,839	522	3,560	1,361,782	
1908	922	70,841	49,272.452	407	67,470	47,809,730	515	3,371	1,462,722	
1909	886	72,733	49,163,710	384	69,518	47,958,562	502	3,215	1,205,148	
1910	881	74,634	48,717,853	390	71,520	47,225,201	491	3,114	1,492,652	
ncrease	93	39,244	28,768,289	80	42,783	27,967,519	13	*3,539	800,770	
Percentage of increase	11.80	110.89	144.21	25.81	148,88	145.18	2.72	*53.19	115,74	

^{*}Decrease.

Table 6 presents the total number of mines, men and tons for eighteen years, with the percentages of the division of each item as to shipping and local mines. During the entire number of years shown, the shipping mines have varied from 35.11 per cent in 1900 to 44.27 per cent in 1910 of all mines in the State.

However, to emphasize the importance of this class of mines in representing and maintaining the coal industry of Illinois, the two columns of percentages, under the heading of men and tons, reveals that during the entire number of years shown, that 76.11 per cent in 1896 to 95.83 per cent in the present year, gives the percentage of men employed in this class of mines, and that the same mines produced during all years shown, from 93.48 per cent in 1895 to 97.55 per cent in the year 1909, of all coal mines in the State. The lowest per cent of men in local mines appear for this year only 4.17 per cent being employed in this class of mines, while the tonnage this year is 3.06 per cent, which is an increase over the last three preceding years.

Table 6—Mines, Men and Tons, with Percentages of Shipping and Local Mines for Eighteen Years—1893-1910.

				Precentages.							
Years.	То	tals—All	Mines.		Shippir	ng.	Local.				
	Mines.		Tons.	Mines.	Men.	Tons.	Mines.	Men.	Tons.		
1893	788	35,390	19,949,564	39.34	81.20	96.53	60.66	18.80	3.47		
1894	836	38,477	17,113,576	38.16	81,20	94.10	61.84	18.80	5.90		
1895	· 855	38,630	17,735,864	36.50	80.70	93.48	63.50	19.30	6.52		
1896	862	37,032	19,786,626	36.62	76.11	96.26	63.38	23.89	3.74		
1897	853-	33,788	20,072,758	36.38	92.72	96.53	63.62	7.28	3.47		
1898	881	35,026	18, 599, 299	37.49	92,30	94.93	62.51	7.70	5.07		
1899	889	36,991	23, 434, 445	36.33	92.74	96.15	63.67	7.26	3.85		
1900	920	39,384	25, 153, 929	35.11	92.16	95.64	64.89	7,84	4,36		
1901	915	44,143	26,635,319	36.17	92.71	95.84	63.83	7.29	4.16		
1902	915	46,005	30,021,300	36,28	93,05	96.01	63.72	6.95	3,99		
1903	933	49,814	34,955,400	37.83	93,34	96.34	62.17	6.66	3.66		
1904	932	54,774	37,077,897	40.77	93,81	96.50	59.23	6.19	3.50		
1905	990	59,230	37,183,374	40,10	94.11	96.70	59.90	5.89	3,30		
1906	1,018	62,283	38,317,581	41.16	94.49	96.88	58.84	5.51	3,12		
1907	933	66,714	47,798,621	44.05	94,66	97.15	55.95	5.34	2.85		
1908	922	70,841	49,272,452	44.14	95.24	97.03	55.86	4.76	2.97		
1909	886	72,733	49,163,710	43.34	95.58	97.55	56.66	4.42	2.45		
1910	881	74,634	48,717,853	44.27	95.83	96.94	55.73	4.17	3.06		

GROUPING OF MINES BY OUTPUT.

Table 7 shows by districts the number of mines and tons divided into six groups: from mines producing under 1,000 to those with an output of 200,000 tons and over. The group of 261 mines whose output was under 1,000 tons for the past year, represent 29.6 per cent of all mines, with an average production of 372 tons each, while seventy-five mines whose output was over 200,000 tons for the past year, represent 9.5 per cent of all mines, with an average production of 321,569 tons each.

Grouping all mines shown in two classes: first, the mines showing an output of 50,000 tons and over, and, second, the mines showing an output of less than 50,000 tons during the year, shows that the mines in the first class number 256 or 29.1 per cent of all mines and produce 44,383,110 tons, while those of the second class number 625 or 70.9 per cent of all mines but produce only 4,334,743 tons or 8.9 per cent of all coal mined.

Table 7—Grouping of Mines by Tonnage and Districts—1910.

		Tonnage and Mines Producing—											
Districts.	Under 1,000		1,000 under 10,000		10,000 un- der 50,000		50,000 un- der 100,000		100,000 un- der 200,000		200,000 and over		
	No.	Tons.	s. No. Tons. No. Tons.		Tons.	No.	No. Tons.		Tons.	No.	Tons.		
First	13	4,376	17	65,123	6	207,411	8	655,010	13	1,803,933	1	282,393	
Second	103	37,903	78	272,917	11	240,391	7	515,967	13	1,949,359	4	864, 228	
Third	35	16,440	40	182,362	27	641,090	9	615,818	7	890,476	2	469,793	
Fourth	59	21,804	17	46,318	2	58,712	13	1,029,291	8	1,205,823	9	2,848,714	
Fifth	5	2,373	21	85, 218	13	360,932	8	575, 441	8	1,249,556	5	1,503,248	
Sixth	3	760	9	35,317	3	91,679	5	318,771	5	757,129	12	4,658,852	
Seventh	4	2,640	8	20,230	9	215,729			11	1,728,314	12	3,946,809	
Eighth	4	1,124	20	91,317	33	930,365	16	1,153,299	8	1,189,506	5	1,665,913	
Ninth	17	4,122	14	60,622	10	251,288	10	701,643	7	1,072,397	15	4,542,594	
Tenth	18	5,724	15	72,876	11	307,580	11	788,711	14	2,064,967	10	3,335,155	
The State	261	97,266	239	932,300	125	3,305,177	87	6,353,951	94	13,911,460	75	24, 117, 699	

Table 8 presents, by districts, the percentages of mines, men and tons. These percentages indicate the parts of the coal field of the State in which our large and important mines are located. The three added lines at the bottom of the table show the percentages for the three previous years. There is shown to be a decrease of mines, men and tons this year from the preceding year in mines of 100,000 tons or over.

Table 8—Percentages of Mines, Men and Tons of Specified Classes, by
Districts—1910.

	Percentages of Mines, Men and Tons—Mines Producing –												
Districts.	Less t	han 10 Tons.	,000 10,000 Tons and Less than 50,000					Tons		100,000 Tons and over.			
Ī	Mines.	Men.	Tons.	Mines.	Men.	Tons.	Mines	Men.	Tons.	Mines.	Men.	Tons.	
First	51.72	4.22	2,30	10,34	7.20	6.87	13,80	22,33	21.70	24.14	66.25	69.13	
Second	83.80	10.98	8.01	5.09	6.10	6.19	3.24	9.96	13.30	7.87	72.96	72.50	
Third	62.50	9,68	7.06	22,50	20.94	22,77	7.50	21.10	21.87	7.50	48.28	48.30	
Fourth	70.37	4.51	1.31	1.85	2.34	1.13	12.04	24.77	19.75	15.74	68.38	77.81	
Fifth	43.33	3.97	2.32	21.67	12.67	9.56	13.33	17.42	15.24	21.67	65.94	72.88	
Sixth	32,43	3.13	0.62	8.11	6.03	1.56	13.51	10.33	5.44	45.95	80.51	92.38	
Seventh	27,27	1,70	0.39	20,46	6,03	3.65				52.27	92.27	95.96	
Eighth	27.91	4.48	1.84	38.37	27.00	18.49	18.60	23.61	22,92	15.12	44.91	56.75	
Ninth	42.47	3,10	0.97	13.70	7.24	3.79	13.70	17;14	10.58	30.13	72.52	84.66	
Tenth	41.77	1.86	1.20	13.92	8.26	4.68	13.93	14.65	11.99	30,38	75.23	82,13	
The State	56.75	4.69	2.11	14.19	9.67	6.79	9.88	15.78	13.04	19.18	69.86	78.06	
1909	57.45	4.82	1.81	15.12	11.04	7.35	7.45	11.45	10.05	19.98	72.69	80.79	
1908	54.67	4.37	1.84	15.84	10.61	7.87	10.62	16.54	14.45	18,87	68.48	75.84	
1907	55,96	5.16	1.96	15.54	11,26	8.17	9.75	14.91	13.80	18.75	68.67	76.07	

Table 9 presents a classification of six groups of mines, showing the number of mines, men and tons in each class. The percentage of mines in the class producing 200,000 tons and over shows a decrease in mines, men and tons.

Table 9—Classification of Mines as to Tonnage, with Percentages of Mines, Men and Tons in Each Class—1910.

	Number	Number	m	Percentages of—			
Mines Producing—	of Mines.	of Men.	Tonnage.	Mines.	Men.	Tons.	
Less than 1,000 tons	261	675	97, 266	29,63	0.91	0.20	
1,000 and less than 10,000	239	2,824	9%2,300	27.12	3.78	1.91	
10,000 and less than 50,000	125	7,217	3,305,177	14.19	9.67	6.79	
50,000 and less than 100,000	87	11,780	6,353,951	9,88	15.78	13.04	
100,000 and less than 200,000	94	23,518	13,911,460	10.68	31.51	28,56	
200,000 and over	75	28,620	24,117,699	8,50	38,35	49.50	
Total	881	74,634	48,717,853	100.00	100.00	100.00	

GROUPING OF MINES FOR A SERIES OF YEARS.

Table 10 presents six classes of mines, grouped by tonnage, for twenty-eight years. Several notable changes appear in some of the groups. The number of mines this year producing under 1,000 tons is less than for any year since 1883, with the exception of the years 1907 and 1908, while the number of mines this year producing 1,000 and under 10,000 tons is less than any year since 1894, with the exception of 1909, which was the same number as this year. In the third group representing the mines producing 10,000 and under 50,000 tons, we find the number is less than any of the last six years. The fourth group shows an increase of twenty-one mines this year over the preceding year. In the fifth group there is shown an increase over the

two preceding years, while in the sixth, which represents mines of 200,000 tons and over, there is shown a decrease from the last three years, although an increase over all other years.

Table 10—Number of Mines in Specified Groups of Tonnage for a Series of Twenty-eight Years—1883-1910.

	Number of Mines Producing—										
Year.	Under 1,000 tons.	1,000 and under 10,000 tons.	10,000 and under 50,000 tons.	50,000 and under 100,000 tons.	100,000 and under 200,000 tons.	200,000 tons and over.	Total mines.				
1883	209	233	133	39	10	15	639				
1884	262	273	148	38	16	4	741				
1885	286	290	143	40	13	6	778				
1886	316	280	135	44	11	3	789				
1887	320	278	141	42	18	2	801				
1888	327	272	151	47	20	5	822				
1889	321	316	139	55	20	3	854				
1890	398	301	155	54	24	4	936				
1891	402	260	161	52	37	6	918				
1892	332	239	151	65	46	6	839				
1893	282	232	140	75	47	12	788				
1894	312	252	161	61	44	6	836				
1895	319	276	145	61	45	9	855				
1896	330	280	128	63	45	16	862				
1897	346	250	120	79	41	17	853				
1898	351	244	151	86	42	7	881				
1899	346	261	123	77	57	25	889				
1900	340	295	123	70	65	27	920				
1901	313	308	124	79	58	33	915				
1902	314	263	152	76	72	38	915				
1903	313	293	120	75	87	45	933				
1904	301	275	140	72	98	46	932				
1905	321	299	147	83	88	52	990				
1906	336	282	167	89	97	47	1,018				
1907	260	262	145	91	95	80	933				
1908	248	256	146	98	92	82	922				
1909	270	239	134	66	90	87	886				
1910	261	239	125	87	94	75	881				
Increase in 28 years	52	6	*8	48	84	60	242				

^{*}Decrease.

Table 11 shows the percentages of the whole number of mines represented in each of the six groups of totals, as shown in Table 10.

Table 11—Percentages of Mines in Specified Grouping of Tonnage for a Series of Twenty-eight Years.

			Perce	entages of Mi	nes Producii	ng-	
Year.	Total.	Under 1,000 tons.	1,000 and under 10,000 tons.	10,000 and under 50,000 tons.	50,000 and under 100,000 tons.	100,000 and under 200,000 tons.	200,000 tons and over.
1883	639	32,71	36,47	20.81	6.10	1.56	2.3
1884	741	35.36	36.84	19.97	5.13	2.16	.5-
1885	778	36.76	37.27	18.38	5.14	2.32	.13
1886	789	40.05	35.49	17.11	5.58	1.39	.3
1887	801	39.95	34,71	17.60	5.24	2.25	.2
1888	822	39.79	33.09	18,37	5.71	2.43	.6
1889	854	37.59	37.00	16.28	6.44	2.34	.38
1890	936	42.52	32.16	16.56	5.77	2.56	.43
1891	918	43.79	28.32	17.54	5.67	4.03	.6.
1892	839	39.69	29.44	17.76	7.03	4.89	1.19
1893	788	35.91	29.44	16.24	10.92	5.71	1.78
1894	836	37.08	29.07	19.62	8.25	5.26	.72
1895	855	36,43	33,29	16,65	7,33	5.25	1.03
1896	862	38,90	30.66	14.88	8.35	5.61	1.60
1897	853	40.56	29,31	14.07	9.26	4.81	1.99
1898	881	39,84	27.70	17.14	9.76	4.77	.79
1899	889	38,92	29,36	13.84	8,66	6,41	2,8
1900	920	36.96	32.07	13.37	7.61	7.06	2.93
1901	915	34.21	33,66	13.55	8,63	6,34	3,6
1902	915	34.32	28,74	16.61	8.31	7.87	4.1
1903	933	33.55	31.40	12.86	8.04	9,33	4.85
1904	932	32,30	29.50	15.02	7.73	10.51	4.9
1905	990	32.43	30.20	14.85	8.38	8.89	5.2
1906	1,018	33.01	27.70	16.40	8.74	9.53	4.65
1907	933	27.82	28.08	15.56	9.76	10,20	8.58
1908	922	26,90	27 .77	15.84	10.63	9.97	8.8
1909	886	30.47	26,98	15.12	7.45	10,16	9.85
910	881	29.63	27.12	14.19	9.88	10.68	8.5
Percentage of in- crease in 28 years	37.9	24.9	2.6	* 6.0	123.1	840.0	400.0

^{*}Decrease.

Table 12 presents for nineteen years the total tons produced by the mines in each group, as shown in Table 10. There is shown to be a decrease in the tonnage this year from last in mines producing under 1,000 tons, with an increase in those of 1,000 to 10,000 tons. There is also shown to be a decrease of those of 10,000 to 50,000 tons, with an increase of those of 50,000 to 100,000 tons and 10,000 to 200,000 tons, while those of the last group with 200,000 tons or over show a decrease.

Table 12—Grouping of Mines by Tonnage for a Series of Nineteen Years.

ļ		Ton	nage of Mines	Producing—		
Year.	Under 1,000 tons.	1,000 and under 10,000.	10,000 and under 50,000.	50,000 and under 100,000.	100,000 and under 200,000.	200,000 and over.
	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.
1892	147,777	1,058,078	4,134,259	4, 293, 472	5,855,091	2,373,599
1893	121,636	726,199	3,132,499	6, 179, 487	6,291,965	3,497,778
1894	137,507	702,623	4,022,545	4,742,257	6,035,094	1,473,550
1895	151,430	866,019	3,609,918	4,416,969	6,346,937	2,344,591
1896	141,690	807,148	3, 265, 822	5,049,694	6, 557, 545	3,962,435
1897	150,445	773,526	3,162,713	5,693,193	5,778,374	4,514,507
1898	161,622	692,149	3,785,962	6,351,513	5,898,596	1,709,457
1899	137,582	790,948	2,877,117	5,618,924	7,443,023	6, 566, 851
1900	154,318	969,424	3,255,570	5,009,326	8,995,963	6,769,328
1901	227,419	838,989	3,393,827	5, 795, 953	8,008,897	8,370,234
1902	161,058	763,597	3,694,890	5,376,350	9,923,538	10, 101, 867
1903	126,678	871,342	3,396,343	5, 445, 195	12,387,437	12,728,405
1904	126,397	934,042	3,602,660	5, 200, 551	13,763,975	13,480,272
1905	129,430	993,394	3,852,565	5,868,103	12,158,090	14,181,792
1906	127,232	949,073	5,097,972	6,116,018	13,462,256	12,565,030
1907	108,875	827,337	3,907,170	6,600,264	13,376,164	22,978,809
1908	95,427	793, 236	3,879,000	7,130,739	13, 181, 385	24, 192, 665
1909	106,124	782,850	3,612,391	4,939,139	12,609,581	27,113,625
1910	97,266	932,300	3,305,177	6,353,951	13,911,460	24,117,699
Increase (+) or decrease (-) in 19 years	-50,511	-125,778	829,082	+2,060,479	+8,056,369	+21,744,100

Table 13 follows Table 12 with the percentage of tons produced in each group for nineteen years. This year the two classes of mines producing 100,000 tons and more represent 78 per cent of the total product, this being a slight decrease over last year.

Table 13—Percentages of Tons Produced by Specified Grouping of Tonnage for Nineteen Years.

		Perce	ntage of T	ons Produ	ced by Mi	ines Produ	cing—
Year.	Total tons.	Under 1,000.	1,000 and under 10,000.	10,000 and under 50,000.	50,000 and under 100,0 0.	100,000 and under 200,000.	200,000 and over.
1892	17,862,276	.82	5.92	23,15	24.04	32.78	13.29
1893	19,949,564	.61	3.64	15.70	30.98	31.54	17.53
1894	17,113,576	.80	4.11	23.50	27,71	35.26	8.61
1895	17,735,864	.85	4.88	20.35	24.91	35.79	13.22
1896	19,786,626	.72	4.08	16.51	25.52	33.14	20.03
1897	20,072,758	.75	3,85	15.75	28.37	28.79	22.49
1898	18,599,299	.87	3.72	20.36	34,15	31.71	9,19
1899	23, 434, 445	,59	3.98	12.28	23.97	31.76	28.02
1900	25, 153, 929	.61	3.86	12.94	19.92	35.76	26,91
1901	26,635,319	.85	3,15	12,74	21.76	30.07	31.43
1902	30,021,300	.54	2.54	12.31	17.90	33.06	33.65
1903	34,955,400	.36	2.49	9.72	15.58	35.44	36.41
1904	37,077,897	.34	2.52	9.72	14.03	37.09	36,30
1905	37,183,374	.35	2.67	10,36	15,78	32.70	38.14
1906	38,317,581	.33	2.48	13.31	15.96	35.13	32.79
1907	47,798,621	.23	1.73	8.17	13.81	27.98	48.08
1908	49,272,452	.11	1.70	7.87	14,48	26.75	49.10
1909	49,163,710	.22	1.59	7.35	10.05	25,64	55,15
1910	48,717,853	,20	1.91	6.79	13.04	28.56	49.50
Percentage of increase (+) or decrease (-) in 19 years	+172.74	-34.18	-11.89	-20.05	+48.00	+137.60	916.08

MINES OF LARGEST OUTPUT.

Table 14 presents for this year a list of ninety-four coal operators, whose output was 100,000 tons and over, but less than 200,000 tons, aggregating a total output of 13,911,460 tons, or 28.56 per cent of the total product of the State. The table also gives the number of men working at each mine, and the number of days each mine was in operation during the year. The average number of days worked was 178; the total number of men employed was 23,518, or 31.51 per cent of the men at all mines. The average output of each mine was 147,992 tons.

Table 14—Mines from Which More than 100,000 Tons of Coal and Less than 200,000 Tons Have Been Delivered During the Year 1910.

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Rank,	Companies.	Location.	Men.	Days.	Tons.
1	Breese Trenton Mining Co., Buxton	Beckemeyer	230	163	199, 278
2	Capital Coal Cos	Springfield	280	209	198, 197
3	Chicago, Springfield Collieries Co., C. S	do	287	180	197, 195
4	Madison Coal Corporation., No. 2	Glen Carbon	234	161	195, 218
5	Breese Trenton Coal Co., W. Mine	Frenton	234	173	195,077
6	Illinois Third Vein Coal Co., No. 1	Ladd	556	198	192,692
7	Wasson Coal Co., No. 1	Harrisburg	151	212	190,723
8	Madison Coal Corporation, No. 5.	Mt. Olive	270	173	189,996
9	Madison Coal Corporation, No. 4	Glen Carbon	250	160	187,983
10	B. F. Berry Coal Co., No. 1	Granville	423	186	187,739
11	Maplewood Collieries Co., No. 2	Farmington	398	144	186,961
12	Western Coal and Mining Co., No. 1	Bush	240	199	185,800
13	Lumaghi Coal Co., No. 3	Cantine	147	215	185,307
14	Pana Coal Co., No. 1	Pana	241	173	184,538
15	Brazil Block Coal Co., No. 2	Westville	450	121	183,907
16	W. P. Rend Collieries Co., No. 1	Rend	223	200	181,079
17	Stonington Coal Co	Stonington	199	167	180,477
18	Spring Valley Coal Co., No. 4	Seatonville	522	181	179,706
19	Muddy Valley Mining & Mfg. Co	Halliday boro	300	152	175,661
20	Williamson County Coal Co	Johnston City	238	172	174,974
21	Montgomery County Coal Co., No. 1	Hillsboro	. 200	206	173,299
22	Oglesby Coal Co., Oglesby	Oglesby	392	195	173,112
23	Chicago & Carterville Coal Co., B	Herrin	235	171	171,903
24	Electric Coal Co., Electric	Danville	277	227	170,241
25	Jos. Taylor Coal Co., St. Ellen	O'Fallon	210	149	168,344
26	Chicago, Wimington & Vermilion Coal Co., No. 1	S. Wilmington	429	177	167,270

Table 14—Continued.

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Rank.	Companies.	Location.	Men.	Days.	Tons.
27	Royal Coal & Mining Co.	Belleville	169	222	166, 595
28	Cardiff Coal Co., No. 2	Cardiff	325	187	166,395
29	Cora Coal Co., No 1	Springfield	209	190	164,897
30	Coal Valley Mining Co., No. 2.	Sherrard	196	223	164,399
31	Canton Coal Co	Canton	226	215	164,105
32	De Camp Coal Mining Co., No. 1.	Staunton	366	224	163,795
33	Big Muddy Coal & Iron Co., No. 9	Murphysboro	231	151	163,677
34	St. Paul Coal Co., No. 2	Cherry	558	106	163,044
35	St. Louis, Carterville Coal Co., Dale	Herrin	253	177	159,599
36	Hafer Washed Coal Co., No. 3	Carterville	186	144	158,620
37	Marion County Coal Co., No. 1	Centralia	170	203	157,717
38	Southern Coal & Mining Co., No. 8	Shiloh	210	141	157,566
39	Big Four Wilmington Coal Co., No. 6	Coal City	385	212	155, 982
40	Duquoin Operating Co., Queen	Clinch	210	155	155,934
41	Penwell Coal Co., Penwell	Pana	248	126	154,170
42	La Salle County Carbon Coal Co., No. 1	La Salle	379	188	153,320
43	Bessemer Washed Coal Co., Oak Ridge	Marissa	153	163	152,435
44	Madison Coal Corparation, No. 8	Dewmaine	334	118	151,890
45	Odin Coal Co., Odin	Odin	226	185	151,868
46	Sangamon Coat Co., No. 2	Springfield	224	195	150,091
47	Clark Coal & Coke Co., No. 2	Bartlett	218	198	148,735
48	Bessemer Washed Coal Co., W. W.	Pinckney ville	218	181	148,505
49	Tuxhorn Coal Co., Tuxhorn	Springfield	205	200	147,451
50	Missouri & Illinois Coal Co., No. 4	Willis ville	156	205	144,610
51	Big Creek Coal Co., No. 2	St. David	314	154	144,570
52	Chicago, Sandoval Coal Co., No. 2	Sandoval	207	202	144,114
53	Braceville Coal Co., No. 6	Braceville	413	184.	143,652
54	Marquette Third Vein Coal Mining Co., No. 1	Marquette	385	175	137,309
55,	Vivian Collieries Co., Greenridge	Greenridge	224	148	137,058
56	West End Coal Co	Springfield	156	169	136,618
57	Simmons Coal Co., Simmons	Canton	169	210	134,784
58	Maplewood Coal Co., No. 1	Farmington	236	147	132,346
59	Saline Coal Co., No. 1	Ledford	181	220	132,067
60	LaSalle County Carbon Coal Co., No. 5	La Salle	269	206	131,974
61	Centralia Coal Co., No. 5	Centralia	285	105	131,873
62	Consolidated Coal Co., No. 8	Mt. Olive	233	135	131,612
63	Southern Illinois Coal & Coke Co., Hemlock	Herrin	112	160	131,346

Table 14-Concluded.

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Rank.	Companies.	Location.	Men.	Days.	Tons.
64	Smith, Lohr Coal Mining Co	Pana	216	131	129,454
65	Peabody Coal Co., No. 2	Marion	207	144	129, 212
66	Chicago, Wilmington & Vermilion Coal Co., No. 2	Streator	288	201	127,449
67	Bessemer Washed Coal Co., Crystal	Tilden	142	155	126,070
68	Citizens Coal Mining Co	Lincoln	185	192	125,755
69	Mathiessen & Hegeler Zinc Co., M. & H	LaSalle	110	284	125,740
70	Brazil Block Coal Co., No. 44	Westville	550	71	125, 527
71	Clover Leaf Coal Mining Co., No. 2	Coffeen	217	154	125, 164
72	Clark Coal & Coke Co., No. 1	Bartlett	170	193	122, 289
73	Big Creek Coal Co., No. 4	Dunfermline	269	133	121,973
74	Manufacturers & Consumers Coal Co	Decatur	231	230	121,242
75	Southern Illinois Coal & Coke Co., O. R	Herrin	178	158	120,414
76	Willis Coal & Mining Co., No. 1	Willisville	192	138	119,479
77	W. P. Rend Coal & Coke Co., No. 2	Herrin	155	178	117,773
78	Superior Coal & Mining Co., Superior	Belleville	140	165	117,734
79	Carterville & Big Muddy Coal Co., John	Cambria	176	160	117,722
80	Norris Coal Mining Co., Norris	Norris	210	172	117,091
81	Chicago, Wilmington & Vermilion Coal Co., No. 3	Streator	230	222	116,576
82	LaSalle County Carbon Coal Co., Union	Peru	309	212	115,454
83	Roanoke Coal Co	Roanoke	281	233	113,473
84	Siar Coal Co., No. 1.	Cuba	177	191	110,379
85	Citizens Coal Mining Co., B.	Springfield	164	177	110,256
86	Kerns Donnewald Coal Co	Worden	183	196	107,624
87	Wenona Coal Co., No. 1	Wenona	274	203	107,401
88	Lincoln Mining Co., No. 1	Lincoln	179	166	106, 428
89	Big Muddy Coal & Iron Co., Harrison		227	119	106,376
90	Suburban Coal & Mining Co., Suburban	Belleville	99	230	105, 685
91	Chicago, Wilmington & Vermilion Coal Co., No. 2	S. Wilmington	308	176	105,610
92	Pocahontas Mining Co., No. 1.	Pocahontas	149	186	103,537
	Barclay Coal & Mining Co		149	178	101,118
	LaSalle County Carbon Coal Co., LaSalle		298	210	100,055
	Total	t	23,518	178	13,911,460
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Table 15 is a continued list of the mines of largest output. This list embraces seventy-five mines, each of which produced 200,000 tons and more during the year. This table, in addition to the number of men employed, tons raised and days of operation at each mine, gives the depth of the coal below the surface; the thickness of the seam and

the manner of mining the coal. The total tons produced at these mines was 24,117,699 tons, or 49.5 per cent of the total tonnage of the State. The number of men working at these mines was 28,620, or 38.35 per cent of the total for the State. These mines show an average working record of 190 days, with an average output to each mine of 321,569 tons. Thirty-three of these mines produced over 300,000 tons each, while there were three mines which produced over 600,000 tons each, one producing 693,029 tons. This mine worked 210 days, yielding the enormous daily average of 3,300 tons. In thirty-seven of the mines shown in this table the coal is mined by hand; these mines employed 14,095 men, or an average of 379 to each mine. The total output of these mines was 9,967,820 tons, being an average of 269,400 tons to each; the average working time was 193 days to each mine.

Machine mining prevailed in twenty-two of these mines, with an average of 389 men to each mine. The average working days were 195 and the product was 8,810,385 tons, or an average of 400,472 tons to each mine. The remaining sixteen mines shown in this table are worked both by hand and machine; these mines employed an average of 371 men, working an average of 188 days, and produced 5,339,494 tons, or

an average of 333,718 tons to each mine.

Attention is directed to both Tables 14 and 15. The mines listed in these tables, when considered together, hold a very important part in the coal mining industry of the State. In the two tables are 169 mines; these constitute only 19.18 per cent of the total number of mines in the State. However, 52,138, or 69.86 per cent, of all the men are employed at these mines. The average days of active operation of these mines was 184, while the total yield of the mines was 38,029,159 tons, or 78.06 per cent of the entire product of the State for this year.

Table 15—Mines from Which More than 200,000 Tons of Coal Have Been Delivered During the Year 1910.

Rank.	Companies.	Location.	Number of men employéd.	Days in operation.	Depth of mine.	Thickness of seam—ft. and inches.	How worked— hand, ma- chine	Tons.
1	Superior Coal Co., No. 3	Gillespie	567	210	350	8	М	693,029
2	Superior Coal Co., No. 2	do	545	212	324	8	М	671,484
3	New Staunton Coal Co., No. 1	Livingston	567	199	287	6	M	613,962
4	Mt. Olive & Staunton Coal Co., No. 2	Williamson	466	185	300	6	M	548,220
5	Superior Coal Co., No. 1	Gillespie	551	204	348	8	M	545,278
6	St. Louis & O'Fallon Coal Co., No. 2	Caseyville	492	179	192	6	Н-М	531,298
7	Bunsen Coal Co., Vermilion	Georgetown	460	242	206	7	Hd.	505,519
8	Big Muddy Coal & Iron Co., No. 8	Clifford	399	223	180	9	M	492,754
9	O'Gara Coal Co., No. 9	Harrisburg	480	194	150	7	Н- М	432,566
10	Shoal Creek Coal Co., No. 1	Panama	433	222	390	8	H-M	429,270

Table 15—Continued.

Rank.	Companies.	Location.	Number of men employed.	Days in opera- tion.	Depth of mine.	Thickness of seam—ft. and inches.	How worked— hand, ma- chine.	Tons.
11	Consolidated Coal Co., No. 15	Mt. Olive	405	196	362	8	M	423, 287
12	Saline County Coal Co., No. 2	Ledford	322	224	144	8	M	423,257
13	Consolidated Coal Co., No. 17	Collinsville	371	185	236	7	M	408,073
14	Johnston City Coal Co., No. 1	Johnston City	532	208	208	9	Hd.	405,559
15	O'Gara Coal Co., No. 3	Harrisburg	477	209	225	6	M	401,657
16	Lumaghi Coal Co., No. 2	Cantine	362	211	165	7	M	390,461
17	Peabody Coal Co., No. 3	Marion	360	181	. 102	9	Н-М	387,248
18	Chicago, Wilmington & Vermilion Coal	Thayer	451	187	292	7.11	M	382,540
19	Sunnyside Coal Co., No. 1	Herrin	427	205	145	9	Н-М	379,542
20	Chicago & Carterville Coal Co., A	do	458	194	180	9	Н-М	375,299
21	Consolidated Coal Co., No. 14	Staunton	355	184	322	7.6	M	~374,898
22	United Coal Mining Co., No. 1	Christopher	402	200	500	9.7	Н-М	374,272
23	Donk Bros. Coal & Coke Co., No. 2	Maryville	467	166	245	7	M	373,900
24	Royal Colliery Co	Virden	400	191	350	6.6	Hd.	372,674
25	Springfield Coal Mining Co., No. 2	Riverton	376	202	240	5.9	Hd.	360,906
26	Illinois Midland Coal Co., Victor	Pawnee	382	214	323	7.6	Hd.	354,902
27	Jones & Adams Coal Co., No. 1	Springfield	341	214	245	5.9	Hd.	348,940
28	Madison Coal Corporation., No. 6	Divernon	398	158	318	8	H-M	340,531
29	Benton Coal Co., No. 1	Benton	391	192	630	9	H-M	332,127
30	Big Muddy Coal & Iron Co., No. 7	Herrin	372	186	140	9	Hd.	329,691
31	Springfield Coal Mining Co., No. 5	Springfield	341	214	250	5.9	Hd.	315,627
32	Brazil Block Coal Co., No. 3	Steelton	427	80		7	Hd.	302,898
33	Zeigler District Collieries Co., N. Mine	Christopher	326	195	517	10	H-M	301,269
34	Franklin County Collieries Co., No. 1	Sesser	331	204	720	8.6	м.	294,148
35	Southern Coal & Mining Co., No. 9	New Baden	367	187	324	8	M	294,137
36	Illinois Midland Coal Co	Sherman	403	150	201	5.9	Hd.	285,643
37	O'Gara Coal Co., No. 4	Harrisburg	359	181	220	6.5	H-M	285,015
38	Christian County Coal Co	Taylorville	285	161	470	7.6	Hd.	284,579
39	Mt. Olive & Staunton Coal Co., No. 1	Staunton	299	174	292	6	M	282,715
40	Co-Operative Coal & Mining Co., No. 1	Breese	317	223	392	7.6	Hd.	282,626
41	St. Paul Coal Co	Granville	677	202	482	3	Hd.	282,393
42	St. Louis & O'Fallon Coal Co., No. 1	Caseyville	370	191	100	6	Hd.	272,443
43	Madison Coal Corporation No. 9	Cambria	345	174	90	9	Hd.	267,145

Table 15—Concluded.

_			men.	ra-	me.	pug	- p	
	Companies.	Location.	fumber of 1 employéd.	поре	of mi	hickness of seam—ft. and inches.	ow worked hand, ma- chine.	Tons.
Rank,			Number	Days in opera- tion.	Depth of mine.	Thickness of seam—ft. a inches.	How worked hand, ma- chine.	
44	Majestic Coal & Coke Co., Majestic	Clinch	405	144	400	9	Hd.	266,810
45	Donk Bros. Coal & Coke Co., No. 1	Donkville	318	154	135	6	Hd.	264,696
46	Girard Collicries Co., No. 5	Girard	314	205	360	7	Hd.	257,500
47	Brazil Block Coal Co., No. 11	W. Frankfort	421	193	500	9	H-M	255,805
48	O'Gara Coal Co., No. 10	Eldorado	301	202	410	4.10	M	254,686
49	Carterville District Coal Co., No. 1	Marion	231	176	80	9	M	248,349
50	O'Gara Coal Co., No. 1	Harrisburg	327	188	315	5.4	H-M	247,575
51	Hillsboro Coal Co.	Hillsboro	228	202	400	7	M	245,780
52	Woodside Coal Co., Woodside	Springfield	305	214	250	5.9	Hd.	242,409
53	Centralia Coal Co., No. 2	Centralia	313	210	576	6	Hd.	237,856
54	Spring Valley Coal Co., No. 3	Spring Valley	593	192	457	3.6	Hd.	237,821
55	Toluca Coal Co., No. 1 and 2	Toluca	692	227	512	3	Hd.	234,927
56	Latham Coal Co., North Shaft	Lincoln	326	205	290	5	Hd.	234,866
57	Chicago & Big Muddy Coal & Coke Co., No. 1	Marion	264	169	81	9	Hd.	232,923
58	Hart Williams Coal Co., No. 1	Benton	310	151	626	9	М	232,777
59	Donk Bros., Coal & Coke Co., No. 3	Troy	298	207	280	5	Hd.	229, 431
60	Prairie Coal Co., Prairie View	Belleville	188	186	200	7	Hd.	227,052
61	Willis Coal & Mining Co., No. 6	Percy	68	208	86	6	Н-М	227,047
62	Burnwell Coal Co., No. 24	Witt	315	153	430	. 8	Hd.	226, 282
63	Breese Trenton Mining Co., E. Mine	Breese	208	212	400	s	Hd.	224,894
64	Paradise Coal Co., Paradise	Duquoin	277	135	374	9	Н-М	220,449
65	O'Gara Coal Co., No. 14	Ledford	328	193	150	6,5	Н-М	220,151
66	Black Diamond Coal Co., No. 1	Auburn	290	151	270	7.6	Hd.	217,126
67	Carterville Coal Co., Burr C	Carterville	286	181	90	9	Hd.	216,645
68	Kortkamp Coal Co., Kortkamp	Hillsboro	206	212	500	7.6	M	214,993
69	Spring Valley Coal Co., No. 5	Dalzell	622	167	339	3,6	Hd.	212,522
70	Mommouth Coal Co., No. 1	Brereton	411	196	90	4.6	Hd.	210,549
71	Springfield Coal Mining Co., No. 6	Taylorville	307	168	460	7.6	Hd.	209,213
72	Burnwell Coal Co., No. 22	Witt	290	150	400	8	Hd.	204,377
73	Centralia Coal Co., No. 4	Centralia	258	200	635	6	Hd.	203,911
74	Spring Valley Coal Co., No. 1	Spring Valley	689	165	421	3.6	Hd.	203,336
75	Bunsen Coal Co., No. 4	Georgetown	375	126		7	Hd.	201,039
	Total and average		28,620	190				24,117,699

Table 16 presents in condensed form the record of all mines producing 50,000 tons and over for fifteen years, showing the total number of mines and tonnage divided in three classes. The mines producing 50,000 tons and less than 100,000 employed 11,780 men and produced 6,353,951 tons. The number of these mines was eighty-seven for the year; this is twenty-one more than last year.

The total of all mines shown in this table is 256, being only 29.06 per cent of all the mines in the State. There were employed at these mines 63,918 men, or 85.64 per cent of the total number of all miners in the State. These mines produced 44,383,110 tons, or 91.10 per cent of the total output of all the mines, being a slight increase in the per cent over last year, although there was a slight decrease in the tonnage of this class of mines.

Table 16—Mines and Output Producing 50,000 Tons and Less than 100,000—100,000 Tons and Less than 200,000, and 200,000 Tons and More, with Total Mines and Tons, for Fifteen Years.

Year.	50,000 to than	ons and less 100,000	100,000 tons and less than 200,000.		More t	han 200,000.	Totals.		
	No. of mines.	Toas.	No. of mines.	Tons.	No. of mines.	Tons.	No. of mines.	Total Tons.	
1896	63	5,049,694	45 -	6,557,545	16	3,962,435	124	15,569,674	
1897	79	5,693,193	41	5,778,374	17	4,514,507	137	15,986,07	
1838	. 86	6,351,513	42	5,898,596	7	1,709,457	135	13,959,566	
1899	77	5,618,924	57	7,443,023	25	6,566,851	159	19,628,79	
1900	70	5,009,326	65	8,995,963	27	6,769,328	162	20,774,61	
1901	79	5,795,952	58	8,008,897	33	8,370,234	170	22,175,08	
1902	76	5,376,350	72	9,923,538	38	10,101,867	.186	25,401,75	
1903	75	5,445,195	87	12,387,437	45	12,728,405	207	30,561,03	
1904	72	5,200,551	98	13,763,975	46	13,460,272	216	32,424,79	
1905	83	5,868,103	88	12,158,090	52	14,181,792	223	32,207,98	
1906	89	6,116,018	97	13,462,256	47	12,565,030	233	32,143,30	
1907	91	6,600,264	95	13,376,164	80	22,978,809	266	42,955,23	
1908	98	7,130,739	92	13,181,385	82	24,192,665	272	44,504,78	
1909	66	4,939,139	90	12,609,581	87	27,113,625	243	44,662,345	
1910	87	6,353,951	94	13,911,460	75	24,117,699	256	44,383,110	

NUMBER OF COAL MINES IN THE STATE.

Table 17 presents the total number of mines reported for the year 1909, also the number opened and abandoned during the present year, and the number reported in operation at the close of the fiscal year.

The Commissioners of Labor, at a special meeting held on June 25, 1909 changed the boundaries of the first, second, third, fourth, sixth,

seventh, eighth and ninth districts for the purpose of a more equal apportionment to the several districts of the number of mines, men and tons. No change was made in the fifth and tenth districts.

The following were the changes made:

Putnam county with two mines was transferred from the third district and added to the first. Fulton county with 111 mines was transferred from the fourth district and added to the second. Logan county with four mines and Menard county with fourteen mines were transferred from the sixth district and added to the third. McLean county with two mines and Tazewell county with nine mines were transferred from the fourth district and added to the third. Brown county with two mines, Morgan county with two mines, Sangamon county with thirty-six mines and Scott county with nine mines, were transferred from the sixth district and added to the fourth, and Cass county with no mines listed was transferred from the sixth district and added to the fourth. Calhoun county with one mine. Greene county with two mines. Jersey county with one mine, Macoupin county with twenty-two mines and Montgomery county with eleven mines, were transferred from the seventh district and added to the sixth. Bond county with one mine and Madison county with twenty-nine mines were transferred from the eighth district and added to the seventh, and Clinton county with four mines and Washington county with three mines were transferred from the ninth district and added to the seventh. Randolph county with fourteen mines was transferred from the ninth district and added to the eighth. The net loss was five in the number of mines from last year. The changes as stated involved 279 mines, which are shown in the table.

Table 17—Gain or Loss in Number of Mines—1909-1910.

Districts.	Total No. of mines 1909.	No. of new mines opened 1910.	Total.	No. of mines aban- doned 1910.	Total No. of mines 1910.	Changes in number of mines reapport-tionment of counties. Added. Deducted.		Total No. of mines 1910.	Year I	1910.
							auctea.			
First	60	2	62	6	56	2		58		2
Second	125	2	127	22	105	111		216	91	
Third	100	5	105	12	93	29	2	120	20	
Fourth	142	41	183	2	181	49	122	108		34
Fifth	63	13	76	16	60			60		3
Sixth	72	1	73	6	67	37	67	37		35
Seventh	44	1	45	1	44	37	37	44		
Eight	99	11	110	8	102	14	30	86		13
Ninth	101	7	108	14	94		21	73		28
Tenth	80	3	83	4	79			79		1
The State	, 886	86	972	91	881	279	279	881	111	116

The counties under the apportionment mentioned now comprise the ten inspection districts and are as follows:

First District—Counties: Grundy, Kankakee, LaSalle, Putnam, Will. Second District—Counties: Bureau, Fulton, Henry, Knox, Mercer, Rock Island, Warren.

Third District—Counties: Livingston, Logan, McLean, Marshall,

Menard, Peoria, Stark, Tazewell, Woodford.

Fourth District—Counties: Brown, Cass, Hancock, Morgan, McDonough, Sangamon, Schuyler, Scott.

Fifth District—Counties: Christian, Edgar, Macon, Moultrie, Shelby, Vermilion

Sixth District—Counties: Calhoun, Greene, Jersey, Macoupin and Montgomery.

Seventh District — Counties: Bond, Clinton, Madison, Marion,

Washington.

Eighth District-Counties: Randolph, St. Clair.

Ninth District—Counties: Franklin, Gallatin, Jefferson, Perry, Saline, Wabash, White.

Tenth District-Counties: Jackson, Johnson and Williamson.

ALL MINES.

Table 18 presents for twenty-one years, the number of mines in operation at the beginning of each year; the number opened or renewed each year, and the number closed or suspended, also the gain or loss in the number of mines from year to year.

Notwithstanding the large number of mines opened and closed during the past twenty-one years, the net increase has only been twenty-seven mines.

Table 18—Total Number of Mines at the Beginning of Each Year, Number Opened and Closed Each Year, Also the Gain and Loss for a Series of Twenty-one Years.

		Nu	mber of Mir.	ies.			
Year.	At beginning of year.	Opened or renewed.	Total.	Closed or suspended.	At close of year.	Gain.	Loss.
1890	. 854	176	1,030	94	936	82	
1891	936	92	1,028	110	918		1
1892	918	59	977	138	839		7
893	839	69	908	120	788		5
894	788	156	944	108	836	48	
895	836	116	952	78	874	38	
896	874	142	1,016	115	901	27	
897	901	70	971	118	853		4
.898	853	120	973	92	881	28	
899	881	129	1,010	121	889	8	
900	889	147	1,036	116	920	31	
901	920	138	1,058	143	915		
902	915	111	1,026	111	915		
903	915	109	1,024	91	933	18	
904	933	109	1,042	110	932		
905	932	168	1,100	110	990	58	
906	990	151	1,141	123	1,018	28	
907	1,018	88	1,106	173	933		8
908	933	97	1,030	108	922		1
909	922	18	1,003	117	886		3
910	886	86	972	91	881		
Total		2,414		2,387		366	33

SHIPPING MINES

Table 19 presents for twenty years, the number of shipping mines in operation at the beginning of each year; the number opened or renewed each year, and the number closed or suspended also the gain or loss of the number of mines of this class each year. This year shows 390 mines of this class in operation, which is a gain of six over last year, there being 27 opened or renewed while there were only 21 closed or suspended. This is the first year since 1906 there has been an increase in this class of mines. This shows a net gain of 82 mines of this class during the last twenty years.

Table 19—Shipping Mines, Number Opened and Closed, Also Gain and Loss for a Series of Twenty Years.

		Nı	ımber of Mir	ies.			
Year.	At beginning of year.	Opened or renewed.	Total.	Closed or suspended.	At close of year.	Gain.	Loss.
1891	308		308				
1892	308		308	9	299		. ,
1893	299	2	301		301	2	
1894	301	18	319		319	18	}
1895	319		319		319		
1896	319	3	322		322	3	
1897	322		322	12	310		1:
1898	310	19	329		329	19	
1899	329		329	8 .	321		
1900	321	2	323		323	2	
1901	323	8	331		331	8	
1902	331	1	332		332	1	
1903	332	21	353		353	21	
1904	353	27	380		380	27	
1905	380	17	397		397	17	
1906	397	22	419		419	22	
1907	419		419	8	411		
1908	411	16	427	20	407		4
1909	407	18	425	41	384		28
1910	384	27	411	21	390	6	
Total		201		119		146	64

, Table 20 shows by districts the number of shipping mines in each, and the gain and loss for the past fifteen years. During these years the net gain in this class of mines was sixty. This year shows a net gain of six mines of this class over last year.

Table 20—Number of Shipping Mines, by Districts, with Gain or Loss for Fifteen Years.

					Dis	tricts.							
Year.	First.	Second.	Third.	Fourth.	Fifth.	Sixth.	Seventh	Eighth.	Ninth.	Tenth.	Total.	Gain.	Loss.
1896	31	19	37	31	23	39	25	65	41	19	330		
1897	28	17	36	24	22	34	25	63	40	21	310		20
1898	32	18	37	26	25	33	27	62	43	26	329	19	
1899	30	17	35	30	21	34	26	60	43	26	322		7
1900	35	16	38	29	19	36	24	61	39	26	323	1	
1901	32	22	33	29	18	38	25	. 66	39	29	331	8	
1902	28	21	32	28	21	39	25	69	39	30	332	1	
1903	28	20	31	26	28	40	27	71	45	37	353	21	
1904	35	23	31	32	27	43	32	72	44	41	380	27	
1905	35	23	31	30	27	46	32	78	51	44	397	17	
1906	34	22	29	33	26	49	36	78	52	60	419	22	
1907	30	16	31	33	22	46	36	78	57	62	411		8
1908	29	15	26	37	18	46	37	75	56	68	407		4
1909	32	14	26	31	25	44	33	64	69	46	384		23
1910	29	37	46	31	30	27	28	65	49	48	390	6	
Gain 15 years Loss 15 years Net gain 15 years	2	18	9		7	12	3		8	29	74 14	122	62
Gain over 1909. Loss from 1909.	3	23	20		5	17	5	1	20	2		51	45
Net gain											6		

Table 21 presents the record of the shipping mines by counties and by districts, giving the number of mines, men and tons, for the years 1909 and 1910 with the gain or loss of each item shown. Forty-two counties appear here, representing the 390 shipping mines; this is a decrease of one county from last year, but a gain of six mines. The number of men employed has increased 2,002 or 2.7 per cent while the number of tons produced has decreased 733,361 tons or 1.5 per cent.

Table 21—Shipping Mines—Number of Mines, Men and Tons by Counties and Districts, with the Gain or Loss, for the Years 1909 and 1910.

Districts and		1909.			1910.		Gain (+) or Loss (-) 1910.			
Counties.	Mines.	Men.	Tons.	Mines.	Men.	Tons.	Mines.	Men.	Tons.	
The State	384	69,518	47,958,562	390	71,520	47,225,201	+6	+2,002	-733,36	
First	34	7,887	3,563,128	29	7,086	2,818,570	-5	801	-744,55	
Grundy	10	2,617	1,158,785	9	2,367	902,804	-1	250	-255,98	
Kankakee	1	73	33,908	1	97	8,435		+24	- 25,47	
LaSalle	17	3,698	1,627,784	15	3,143	1,302,348	-2	-555	-325, 43	
Putman	2	996	561,804	2	1,100	470,132		+104	-91,67	
Will	4	503	180,847	2	379	134,851	-2	-124	-45,99	
Second	37	8,222	4, 245, 570	37	S, 064	3,555,007		-158	-690, 56	
Bureau	8	4,372	1,635,504	7	3,925	1,326,430	-1	-447	309,07	
Fulton	23	3,174	2,147,519	22	3,504	1,867,017	-1	+330	-280,5	
Henry	2	158	80,929	3	151	78,570	+1	7	-2,3	
Mercer	3	499	370,726	4	466	275, 237	+1	-33	-95,4	
Rock Island	1	19	10,900	1	18	7,753		-1	-3,1	
Third	43	4,762	2,446,099	46	4,988	2,573,305	+3	+226	+127,2	
Livingston	2	404	220,122	2	367	190, 207		-37	-29,9	
Logan	4	668	343,582	4	716	475,536		+48	+131,9	
McLean	2	268	129,614	2	270	101,860		+2	-27,7	
Marshall	4	955	415,052	5	1,031	370,354	+1	+76	-44,6	
Menard	7	515	268,575	7	554	321,443		+39	+52,86	
Peoria	15	1,148	696,341	18	1,287	799,994	+3	+139	+103,6	
Stark	1	20	4,346	1	36	12,479		+16	+8,1	
Tazewell	6	300	183,500	5	270	131,197	1	-30	-52,30	
Woodford	2	484	184,964	2	457	170,235		-27	-14,75	
Fourth	33	6,889	5, 283, 857	31	6,875	5,076,961	-2	-14	206, 8	
Sangamon	33	6,889	5, 283, 857	31	6,875	5,076.961	-2	-14	-206,8	

Table 21—Concluded.

Districts and		1909.			1910.		Gain (+) or Loss (-) 1910.			
Counties.	Mines.	Men.	Tons.	Mines.	Men.	Tons.	Mines.	Men.	Tons.	
Fifth	25	5,698	3,739,870	30	6,137	3,540,393	+5	+439	-199,477	
Christian	8	2,011	1,374,411	8	1,870	1,292,876		-141	-81,535	
Macon	4	453	197,633	5	552	265,530	+1	+99	+67,897	
Moultrie	1	32	4,800	1	34	5,520		+2	+720	
Shelby	2	340	146,873	2	303	143,867		-37	-3,006	
Vermilion	10	2,862	2,016,153	14	3,378	1,832,600	+4	+516	-183,553	
Sixth	26	6, 532	5,825,172	27	7,069	5,834,289	+1	+537	+9,117	
Macoupin	16	4,603	4,350,537	17	4,878	4,029,606	+1	+275	-320,931	
Montgomery	10	1,929	1,474,635	10	2,191	1,804,683		+262	+330,048	
Seventh	34	7,281	5,511,062	28	7,002	5,817,192	6	-279	+306,130	
Bond	2	171	93,095	1	149	103,537	-1	-22	+10,442	
Clinton	6	1,551	1,047,581	4	1,122	1,000,935	-2	-429	-46,646	
Madison	17	4,004	3,245,824	16	4,182	3,647,452	1	+178	+401,628	
Marion	7	1,450	1,096,847	7	1,549	1,065,268		+99	-31,579	
Washington	2	105	27,715				-2	-105	-27,715	
Eighth	55	5,389	4,008,414	65	6,175	4,892,326	+10	+786	+883,912	
Randolph	10	937	742,667	10	881	831,428		-56	+88,761	
St. Clair	45	4,452	3,265,747	55	5,294	4,060,898	+10	+842	+795, 151	
Ninth	51	9,198	6,834,747	49	9,279	6,612,298	-2	+81	-222,449	
Franklin	11	2,732	2,442,978	10	2,630	2,071,143	-1	-102	-371,835	
Gallatin	2	136	45,644	2	126	69,015		-10	+23,371	
Jefferson				1	35	8,485	+1	+35	+8,485	
Perry	19	2,230	1,527,654	18	2,361	1,384,810	-1	+131	-142,844	
Saline	18	4,066	2,797,261	17	4,081	3,055,065	-1	+15	+257,804	
White	1	34	21,210	1	46	23,780		+12	+2,570	
Tenth	46	7,660	6,500,643	48	8,845	6,504,860	+2	+1,185	+4,217	
Jackson	10	1,030	630,886	10	1,165	646,447		+135	+15,561	
Williamson	36	6,630	5,869,757	38	7,680	5,858,413	+2	+1,050	-11,344	

Table 22 presents a list of 268 operators having the management of the 390 shipping mines, giving the names of the operators, the number and location of the mines operated, the total output of the mines at each location and the distribution of the tonnage. The O'Gara Coal Company with its eleven mines again heads the list, while the Consolidated Coal Company with eight mines which was at the head last year goes to third place. The Superior Coal Company with three mines has retained second place, which it occupied last year. These mines represent only 44.27 per cent of all mines of the State. However they employed 95.83 per cent of all men and produced 96.94 per cent of the total output of the State. The distribution of the classified total tonnage shown at the head of the table reveals that 91.1 per cent was loaded on cars at the mines for shipment; 1.9 per cent went to locomotives coaling at the mines: 3.4 per cent was sold to the local trade and 3.6 per cent was consumed or wasted at the mines.

Table 22—Shipping or Commercial Collieries—Distribution of Output for Year 1910.

					Dist	ribution of	Output—	Γons.
No. of operators.	Name of Operator.	No. of mines.	Location of mine—postoffice.	Total output all grades—tons.	Loaded on cars at mine for shipment	Supplied to loco-motives at mine chutes.	Sold to local trade.	Con- sumed and wasted at mine.
	All shipping mines	390		47, 225, 201	43,007,015	885,392	1,606,141	1,726,653
1	O'Gara Coal Co	11		2,185,318	2,116,460	1,116	25,546	42,196
	do	5	Harrisburg	1,408,391	1,372,262		14,980	21,149
	do	3	Eldorado	420,667	403,659		7,795	9,213
	do	1	Ledford	220, 181	216,786	1,116	2,279	· · · · · · · · · · · · · · · · · · ·
	do	2	Carrier mills	136,079	123,753		492	11,834
2	Superior Coal Co	3	Gillespie	1,909,791	1,858,787		1,960	49,044
3	Consolidated Coal Co	8		1,469,337	1,288,987	10,672	10,260	159,418
	do	2	Mt. Olive	554,899	494,998		2,028	57,873
	do	1	Collinsville	408,073	349,025			59,048
	do	3	Staunton	395,573	341,196	10,533	6,540	37,304
	do	1	Belleville	69,520	66,586			2,934
	do	1	Gillespie	41,272	37,182	139	1,692	2,259
4	Madison Coal Corp	6		1,332,763	1,233,405	16,766	10,309	72, 283
	do	2	Glen Carbon	383,201	334, 196	1,123	3,262	44,620
	do	1	Divernon	340,531	327,248		3,991	9,292
	do	1	Cambria	267,145	263,963		1,020	2,162
	do	1	Mt. Olive	189,996	166,670	15,643	775	6,908
	do	1	Dewmaine	151,890	141,328		1,261	9,301

Table 22—Continued.

5.				l	Dist	ributlon of	Output—	Tons.
No. of operators.	Name of Operator.	No. of mines.	Location of mine—postoffice.	Total output all grades—tons.	Loaded on cars at mine for shipment	Supplied to loco- motives at mine chutes.	Sold to local trade.	Con- sumed and wasted at mine.
5	Big Muddy C. & I. Co	4		1,092,498	1,024,814		4,803	62,881
	do	1	Clifford	492,754	464,068		1,828	26,858
	do	1	Herrin	329,691	306,448		2,975	20,268
	do	2	Murphysboro	270,053	254, 298			15,755
6	Springfield C. & M. Co	4		978,071	898,910	14,897	21,437	42,827
	do	2	Springfield	407,952	397,379		28	10,545
	do	1	Riverton	360,906	342,948		2,000	15,958
	do	1	Taylorville	269,213	158, 583	14,897	19, 409	16,324
7	Chi., Wil. & V. C. Co	6		977,893	913,917		16,104	47,872
	do	1	Thayer	382,540	347,326		1,954	33,260
	do	3	S. Wilmington.	351,328	328, 531		8,185	14,612
	do	2	Streator	244,025	238,060		5,965	
8	Brazil Block Coal Co	5		912,128	896,154		2,878	13,096
	do	2	Steelton	346,889	341,951		1,378	3,560
	do	2	Westville	309,434	305,798			3,636
	do	1	W. Frankfort	255,805	248,405		1,500	5,900
9	Donk Bros. C. & C. Co	3		868,027	836,944	2,297	6,016	22,770
	do	1	Maryville	373,900	362,887	35	1,481	9,497
	do	1	Donkville	264,696	254,893	2,203	248	7,352
	do	1	Troy	229,431	219,164	59	4,287	5,921
10	Spring Valley Coal Co	4		833,385	774,510	8,449	21,712	28,714
İ	do	2	Spring Valley	441,157	401,618	8,449	15,714	15,376
	do	1	Dalzell	212,522	205,004		1,724	5,794
	do	_1	Seatonville	179,706	167,888		4,274	7,544
11	Mt. Olive & S. C. Co	2		830,935	806,588	6,808	3,513	14,026
	do	1	Williamson	548, 220	539,087		1,074	8,059
	do	_ 1	Staunton	282,715	267,501	6,808	2,439	5,967
12	St. L. & O'Fallon C. Co.	2	Caseyville	803,741	792,260	4,516		6,965
13	Bunsen Coal Co	-4		798,308	786,227		680	11,401
	do	2	Georgetown	706, 558	698, 157		602	7,799
	do	2	Danville	91,750	88,070		78	3,602
14	Illinois Midland Coal Co.	2		640,545	623,061	2,887	5,731	8,866
	do	1	Pawnee	354,902	342,395	2,683	5,704	4,120
	do	1	Sherman	285,643	280,666	204	27	4,746

Table 22—Continued.

		_			Dist	ribution o	f Output—	Tons.
No. of operators.	Name of Operator.	No. of mines.	Location of mine—postoffice.	Total output all grades—tons.	Loaded on cars at mine for shipment	motives	Sold to local trade.	Con- sumed and wasted at mine.
15	Breese-Trenton M. Co	3		619,249	499, 456	54,73	13,191	51,867
	do	1	Breese	224,894	140,236	54,735	9,500	20,423
	do	1	Beckemeyer	199,278	170,056		1,679	27,543
	do	1	Trenton	195,077	189,164		2,012	3,901
16	Peabody Coal Co	3		614,464	579,741		4,990	29,733
	do	2	Marion	516,460	487,127		3,109	26,224
	do	1	Nokomis	98,004	92,614		1,881	3,509
17	New Staunton Coal Co	1	Livingston	613,962	604,839		2,556	6,567
18	Southern C. & M. Co	- 8		607,347	572,015		7,618	27,714
	do	1	New Baden	294, 137	279,466		1,516	13, 155
	do	1	Shiloh	157,566	150,639		233	6,694
	do	6	Belleville	155,644	141,910		5,869	7,865
19	LaSalle County Coal Co.	5		597,140	452,000	70,311	45,660	29,169
	do	4	LaSalle	481,686	394, 541	38,506	24,776	23,863
	do	1	Peru	115,454	57,459	31,805	20,884	5,306
20	Lumaghi Coal Co	2	Cantine	575,768	564,441		3,935	7,392
21	Centralia Coal Co	3	Centralia	573,640	416,303	111,285	24,551	21,501
22 ,	Saline County Coal Co	2	Ledford	555, 324	547, 519		1,410	6,395
23	Bessemer W. Coal Co	6		551,738	504,978	30,054	5,724	10,982
	do	2	Tilden	180,335	174,260		2,435	3,640
	do	2	Marissa	168,875	166,003	55	353	2,464
	do	1	Pinckneyville	148,505	112,674	29,999	1,834	3,998
	do	1	Lenzburg	54,023	52,041		1,102	880
24	Chi. & Carterville C. Co.	2	Herrin	547,202	499,164	1,624	5,829	40,585
25	St. Paul Coal Co	2		445,437	427,154	3,878	5,167	9,238
	do	1	Granville	282,393	267,169	3,878	4,368	6,978
	do	1	Cherry	163,044	159,985		799	2,260
26	Burnwell Coal Co	2	Witt	430,659	415,383		6,271	9,005
27	Shoal Creek Coal Co	1	Panama	429,270	315,831		106,924	6,515
28	Johnston City Coal Co	1	Johnston City	405,559	401,959			3,600
29	Sunnyside Coal Co	1	Herrin	379,542	351,820		1,988	25,734
30	United Coal M. Co	1	Christopher	374,272	368,509		1,510	4,253
31	Royal Colliery Co	1	Virdeu	372,674	340,392		3,797	28,485
32	Jones & Adams Coal Co.	1	Springfield	348,940	341,218			7,722

Table 22—Continued.

					Disti	ibution of	Output—T	ons.
No. of operators.	Name of Operator.	No. of mines.	Location of mine—postoffice.	Total output all grades— tons.	Loaded on cars at mine for shipment	Supplied to loco-motives at mine chutes.	Sold to local trade.	Con- surned and wasted at mine.
33	Willis Coal & Mining Co.	2		346,526	339,557		1,554	5,415
	do	1	Perry	227,047	220,078		1,554	5,415
	do	_ 1	Willisville	119,479	119,479			
34	Benton Coal Co	1	Benton	332,127	309,157		8,346	14,624
35	Jos. Taylor Coal Co	3	O'Fallon	321,031	292,530	701	2,300	25,500
36	Maplewood Collieries Co.	2	Farmington	319,307	312,616		431	6,260
37	Citizens Coal Mining Co.	3		317,550	270,953	21,945	12,622	12,030
	do	2	Springfield	191,795	184,700	53	2,350	4,692
	do	1	Lincoln	125,755	86,253	21.892	10,272	7,338
38	Big Creek Coal Co	3		311,344	296,322	1,013	1,078	12,931
	do	1	St. David	144,570	138,059	119	2	6,390
	do	1	Dunfermline	121,973	117,193			4,780
	do	1	Cuba	44,801	41.070	894	1,076	1,761
39	Zeigler Dist. Col. Co	1	Christopher	301,269	291,036		3,388	6,845
40	Franklin Co. Col. Co	1	Sesser	294,148	285,508			S, 640
41	Christian Co. Coal Co	1	Taylorville	284,579	267,145		11,084	6,350
42	Co-operative C. & M. Co.	1	Breese	282,626	279,280			3,346
43	Pana Coal Co	2	Pana	274,202	166,711	38,885	61,320	7,286
44	Star Coal Co	5		272,408	264,309	1,689	1,010	5, 400
	do	3	Cuba	209,242	202,953	1,689		4,600
	do	1	Fiatt	62,896	61.196		900	800
	do	1	Freeburg	270	160		110	
45	Clark Coal & Coke Co	2	Bartlett	271,024	263,924			7,100
46	Majestic Coal & Coke Co	1	Clinch	266,810	117,810		140,000	9,000
47	So. III. C. & C. Co	3	Herrin	266,579	252,323		3,263	10,993
48	Girard Collieries Co	1	Girard	257,500	246,794		6,737	3,969
49	Carterville Dist. C. Co	1	Marion	248,349	237,399			10,950
50	Hillsboro Coal Co	1	Hillsboro	245,780	231,769		9,175	4,836
51	Woodside Coal Co	1	Springfield	242,409	182.507	36,819	20,962	2,121
52	Big Four W. C. Co	2		239,767	228,971		3,304	7,492
	do	1	Coal City	155,982	150,690			5,292
	do	1	Carbon Hill	83,785	78,281		3,304	2,200
53	Toluca Coal Co	1	Toluca	234,927	177,420	40,277	5,591	11,639

Table 22—Continued.

ń					Dist	ribu tl on of	Output—	Cons.			
No. of operators.	Name of Operator.	No. of mines.	Location of mine—postoffice.	Total output all grades— tons.	Loaded on cars at mine for shipment	Supplied to loco-motives at mine chutes.	Sold to local trade.	Con- sumed and wasted at mine.			
54	Latham Coal Co	1	Lincoln	234,866	217,583		11,783	5,500			
55	Chi. & Big M. C. & C. Co	1	Marion	232,923	230,742		250	1,931			
56	Hart, Williams C. Co	1	Benton	232,777	222,273		5,938	4,566			
57	Prairie Coal Co	1	Belleville	227,052	224,200	400	400	2,052			
58	Paradise Coal Co	1	Duquoin	220,449	197,802	15,992	1,254	5,401			
59	Black Diamond C. Co	1	Auburn	217,216	212,269		1,342	3,605			
60	Carterville Coal Co	1	Carterville	216,645	209,445		1,520	5,683			
61	Kortkamp Coal Co	1	Hillsboro	214,993	210,549		1,022	3,422			
62	Mommouth Coal Co	1	Brereton	210,549	201,586		3,984	4,979			
63	Mo. & Ill. Coal Co	4		203,856	201,716		398	1,742			
	do	1	Willisville	144,610	143,432		260	918			
	do	1	Rentchler	30,252	29,654		93	505			
	do	1	Wilderman	18,793	18,590		40	163			
	do	1	Freeburg	10,201	10,040		5	156			
64	Capital Coal Co	1	Springfield	198,197	119,387	33,930	37,580	7,300			
65	Chi., Spring. Coal Co	1	Springfield	197,195	192,134			5,061			
66	Ill. 3d Vein C. Co	1	Ladd	192,692	151,996	23,462	5,391	11,842			
67	Wasson Coal Co	1	Harrisburg	190,723	186,678		1,095	2,950			
68	B. F. Berry Coal Co	1	Granville	187,739	175,919		3,226	8,594			
69	Coal Valley Mining Co	2		187,002	174,108	1,548	4,441	6,905			
	do	1	Sherrard	164,399	152,780	1,548	4,374	5,697			
	do	1	Mathersville	22,603	21,328		67	1,208			
70	Western C. & M. Co	1	Bush	185,800	170,643		1,338	13,819			
71	Chi., Sandoval C. Co	2	Sandoval	182,043	170,443		5,300	6,300			
72	W. P. Rend Col. Co	1	Rend	181,079	175,563		977	4,539			
73	Stonington Coal Co	1	Stonington	180,477	167,048		6,071	7,358			
74	Wabash Coal Co	2		177,513	162,453		5,192	9,868			
	do	1	Dawson	93,838	86,776		2,515	4,547			
	do	1	Athens	83,675	75,677		2,677	5,321			
75	Muddy V. M. & Mfg. Co	. 1	Hallidayboro	175,661	121,225	41,300	2,939	10,197			
76	Williamson Co. C. Co	1	Johnston City	174,974	170,591			4,383			
77	Montgomery Co. C. Co	1	Hillsboro	173,299	167,696			5,603			
78	Oglesby Coal Co	1	Oglesby	173,112	156,592	802	5,426	10,292			

Table 22—Continued.

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					Distr	ibution of	Output-T	ons.
No. of operators.	Name of Operator.	No. of mines.	Location of mine—postoffice.	Total output all grades—tons.	Loaded on ears at mine for shipment	Supplied to loco-motives at mine chutes.	Sold to local trade.	Con- sumed and wasted at mine.
79	Kolb Coal Co	4		171,535	89,235	70,331	3,679	8,290
	do	1	Mascoutah	70,421	17,880	46,206	3,641	2,694
	do	1	Lenzbury	62,273	36,833	24,125		1,315
	do	1	New Athens	33,050	29,212		38	3,800
	do	_1	Berkner	5,791	5,310			481
80	Electric Coal Co	1	Danville	170,241	141,941	25,300	500	2,500
S1	Can. Co-operative C. Co.	2	Springfield	166,806	157,100	1,542	5,300	2,864
82	Royal C. & M. Co	1	Belleville	166,595	163,345		250	3,000
83	Cardiff Coal Co	1	Cardiff	166,395	149,311		3,535	13,549
84	Cora Coal Co	1	Springfield	164,897	163,046		1,236	615
85	Canton Coal Co	1	Canton	164,105	163,755			350
86	De Camρ C. M. Co	1	Staunton	163,795	156,390		7,405	
87	Wilmington Star M. Co.	2	Coal City	163,679	153,784		4,263	5,632
SS	St. L., Carterville C. Co.	1	Herrin	159,599	156,126	332	1,178	1,963
89	Hafer Washed Coal Co	1	Carterville	158,620	146,960		196.	11,464
90	Marion Co. Coal Co	1	Centralia	157,717	153,842		275	3,600
91	Duquoin Operating Co	1	Clinch	155,934	144,934		3,000	8,000
92	Penwell Coal Co	1	Pana	154,170	115,834	21,757	11,311	5,268
93	Odin Coal Co	1	Odin	151,868	139,372		3,064	9,432
94	Sangamon Coal Co	1	Springfield	150,091	143,886		2,805	3,400
95	Tuxhorn Coal Co	1	do	147,451	143,451		400	3,600
96	Braceville Coal Co	1	Braceville	143,652	138,235		3,453	1,964
97	Alden Coal Co	3		142,410	136,183		1,663	4,564
	do	1	Farmington	82,553	79,449		675	2,429
	do	1	Norris	53,415	50,706		688	2,021
	do	_1	Mathersville	6,442	6,028		300	114
98	Jones Bros. C. & M. Co	2		137,946	125,670		2,276	10,000
	do	1	Tilden	69,594	65,594			4,000
	do	_ 1	Marissa	68,352	60,076		2,276	6,000
99	Mar. 3d Vein C. M. Co	1	Marquette	137,309	113,910		12,082	11,317
100	Vivian Collieries Co	1	Greenridge	137,058	133,142		1,013	2,903
101	West End Coal Co	1	Springfield	136,618	109,911		23,219	3,488
102	Simmons Coal Co	1	Canton	134,784	132, 584			2,200

Table 22—Continued.

		i			Distr	ibution of (Output—T	ons.
No. of operators.	Name of Operator.	No. of mines.	Location of mine—postoffice.	Total output all grades— tons.	Loaded on cars at mine for shipment	Supplied to loco-motives at mine chutes.	Sold to local trade.	Con- sumed and wasted at mine.
103	Taylor Coal Co	2	Herrin	132,991	126,146	3,953	339	2,553
104	Smith Lohr C. M. Co	1	Pana	129, 454	46,664		76,339	6,451
105	Decatur Coal Co	3	Decatur	129,247	49,138		77,260	2,849
106	Clover Leaf C. M. Co	1	Coffeen	125,164	117, 269		3,754	4,141
107	Mfg. & Con. Coal Co	1	Decatur	121,242	55,032		59,131	7,079
108	W. P. Rend C. & C. Co.	1	Rendville	117,773	112,979		500	4,294
109	Superior C. & M. Co	1	Belleville	117,734	116,159			1,575
110	Carterville Big M. C. Co.	1	Cambria	117,722	109,798		746	7,178
111	Norris Coal Mining Co	1	Norris	117,091	95,973	14,854	1,828	4,436
112	Newsam Bros	4		113,629	108,077		1,442	4,110
	do	2	Peoria	74,681	72,071		681	1,929
	do	1	Farmington	23,572	20,898		761	1,913
	do	1	Kingston Mines	15,376	15,108			268
113	Roanoke Coal Co	_ 1	Roanoke	113,473	96,607	5,380	4,790	6,696
114	Standard W. Coal Co	2		112,536	112,536			
	do	1	Bissell	67,688	67,688			
	do	1	Spaulding	44,848	44,848			
115	Kerns-Domewald C. Co.	1	Worden	107,624	99,624		6,100	1,900
116	Wenona Coal Co	1	Wenona	107,401	95,899		8,402	3,100
117	Lincoln Mining Co	1	Lincoln	106, 428	76,666		21,142	8,620
118	Suburban C. & M. Co	1	Belleville	105,685	101,885		1,800	2,000
119	Watson Coal Co	2	Herrin	105,000	100,000	1,000	200	3,800
120	Pocahontas Mining Co	1	Pocahontas	103,537	96,830		1,507	5,200
121	Borders Coal Co	2	Marissa	103,189	98,103		3,141	1,945
122	Barclay C. & M. Co	_ 1	Barclay	101,118	95,545		1,973	3,600
123	Cart, & Herrin C, Co	1	Herrin	99,816	96,332		250	3,234
124	Eldorado C. M. Co,	1	Eldorado	98,670	94,290		1,587	2,793
125	Standard Collieries Co	2		98,16	89,448		2,149	6,570
	do	1	White Ash	57,65	52,428		425	4,799
	do	1	Johnston City.	40,515	37,017		1,724	1,771
126	Century Coal Co	1	Tower Hill	97,88	92,956		3,181	1,748
127	West Virginia Coal Co	1	Marion	. 97,610	96,610			1,000

Table 22—Continued.

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00					Distr	ributlon of	Output-T	ons.			
No. of operators.	Name of Operator.	No. of mines.	Location of mine—postoffice.	Total output all grades—tons.	Loaded on cars at mine for shipment	Supplied to loco-motives at mine chutes.	Sold to local trade.	Con- sumed and wasted at mine.			
128	Moffat Coal Co	1	Sparta	97,567	91,567		1,000	5.000			
129	Springfield Coop, C. Co	1	Springfield	96,700	69,000		24,000	3,700			
130	Williamsville Coal Co	1	Selbytown	96,329	90,806		1,642	3,881			
131	Illinois Zine Co	1	Deerpark Glen.	90,687	87,894		880	1,913			
132	Fullerton Coal Co	1	Belleville	- 89,699	89, 299		150	250			
133	Spring Creek Coal Co	1	Springfield	88,361	85,797		385	2,179			
134	McLean Co. Coal Co	1	Bloomington	88,000	6,000	20,000	52,000	10,000			
135	Donally, Koen. C. Co	1	Carterville	86,401	83,888		400	2,113			
136	International C. & M. Co	2	O'Fallon	86,098	77,043		3,573	5,482			
137	Wil, C, M. & Mfg, Co	_	Torino	86,016	79,493		3,381	3,142			
138	Gartside Coal Co	2	Murphysboro	82,485	58,185		12,987	11,313			
139	Eagle Mining Co	1	Canton	82,299	58,934	12,062	9,227	2,076			
140	Empire Coal Co		Gilerist	81,793	77,135		2,172	2,486			
141	Illinois Fuel Co	1	Sparta	79,656	77,126			2,530			
142	Sholl Bros	1	S. Bartonville	76,669	74,517		30	2,122			
143	Mulberry Hill C. Co	1	Freeberg	76,232	74,832		800	600			
144	Robert Dick Coal Co	1	Cambria	75,535	69,935		1,700	3,900			
145	E. S. Gray Coal Co	1	Missionfield	74,855	73,107		341	1,407			
146	Bald Eagle M. Co	1	Winkle	74,480	68,979		1,121	4,380			
147	Wolsehlag Coop. C. Co	1	Peoria	72,837	63,397	7,000		2,440			
148	Gus Blair Big M. C. Co	2	Murphysboro	70,793	60,538		4,420	5,835			
149	Middletown Coal Co	1	Middletown	69,028	63,270		2,567	3,191			
150	Dickerson Coal Co	1	Springfield	68,518	65,011		867	2,640			
151	Wilson Bros. Coal Co	1	Sparta	68,015	64,880		2,195	940			
152	Carlinville Coal Co	1	Carlinville	65,938	45,866	1,899	14,661	3,512			
153	Tilton Coal Co	1	Danville	64,863	64,863						
154	Auburn & Alton C. Co	1	Auburn	64,609	55,309	8,300		1,000			
155	Kewanee C. & M. Co	1	Kewanee	63,415	58,860		3,733	822			
156	Brilliant C. & C. Co	1	Duquoin	62,692	59,192		500	3,000			
157	Tazewell Coal Co	1	Pekin	61,287	57,079		1,960	2,248			
158	Assumption Coal Co	1	Assumption	60,781	42,823		9,887	. 8,071			
159	T.J. O'Gara	1	Springfield	57,780	56, 430		250	1,100			
160	Big M. Cart. M. Co	1	Royalton	57,238	52,493		386	4,359			
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Table 22-Continued.

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øž.					Distr	ibution of	Output—1	ons.
No. of operators.	Name of Operator.	No. of mines.	Location of mine—postoffice.	Total output all grades—tons.	Loaded on cars at mine for shipment	Supplied to loco-motives at mine chutes.	Sold to local trade.	Con- sumed and wasted at mine.
161	Minouk Coal Co	1	Minonk	56,762	46, 491		7,251	3,020
162	Chi., Herrin C. Co	1	Herrin	56,568	43,096	6,641	2,766	4,065
163	Cahill Coal Co	1	Peru	56,058	10,240	27,380	16,163	2,275
164	Crescent Coal Co	1	Peoria	55,483	44,248			11,235
165	Johnson, Allen Coal Co	1	Cutler	54,096	46,896	6,200		1,000
166	Lukins & Andrews	1	Virden	52,440	39,440	4,000	6,000	3,000
167	Gallatin C. & C. Co	1	Equality	52,407	41,531	4,582	1,207	5,087
168	Athens Mining Co	1	Athens	52,077	48,776		1,875	1,426
169	Farmersville C. M. Co	1	Farmersville	51,424	45,586		5,516	322
170	Glenridge Coal Co	1	Virden	50,965	48,283		259	2,423
171	Acme Coal Co	1	Streator	49,949	30,700		11,513	7,736
172	Applegate & Lewis	1	Hanna City	49,369	46,249		1,691	1,429
173	St. L., Coulterville C. Co	1	Coulterville	49,040	45,833		1,899	1,308
174	Murphy, Linskey & Kas	1	Braidwood	48,835	41,344		6,396	1,095
175	Pittsburg Mining Co	1	Belleville	47,800	41,624		4,220	1,956
176	Collier Coop. C. Co	1	Bartonville	46,733	45,533			1,200
177	Pond Creek Col. Co	1	Herrin	45,993	41,113		100	4,780
178	Moweaqua C. M. & M. C.	1	Moweaqua	45,982	33,484		10,053	2,445
179	National Coal M. Co	1	Middle Grove	45,859	43,169		500	2,190
180	Summit Coal Co	1	Belleville	45,744	45,003		90	651
181	Harrison Coal Co	1	Streator	44,996	36,252		2,300	6,444
182	Danville Coll. Co	1	Catlin	44, 465	42,505		960	1,000
183	Cluley Miller C. Co	1	O'Fallon	42,439	40,386		57	1,996
184	Boyd C. & C. Co	1	Sparta	40,918	38,737		1,431	750
185	Johnson Coal Co	1	Marissa	40,591	39,091		500	1,000
186	Williarmile C. & C. Co	1	Belleville	40,050	32,000		7,250	800
187	Randolph Co. C. M. Co	1	Coulterville	39,899	38,078		801	1,020
188	South Mt. Coal Co	1	Petersburg	38,063	22,625	4,243	10,480	715
189	Avery C. & M. Co	1	Freeburg	38,045	34,838		1,115	2,092
190	Big Muddy Fuel Co	1	Johnston City	37,864	35,759		105	2,000
191	Litchfield Coal Co	_ 1	Litchfield	36,090	20,089		12,650	3,352
192	Edwardsville Coal Co	1	Edwardsville	34,263	18,061	4,786	8,607	2,809
193	Tallula Coal Co	1	Tallula	32,078	27,464		3,305	1,309

Table 22—Continued.

80					Dist	ribution of	Output—	Tons.
No. of operators.	Name of Operator.	No. of mines.	Location of mine—postoffice.	Total output all grades— tons.	Loaded on cars at mine for shipment	Supplied to loco- motives at mine chutes.	Sold to local trade.	Con- sumed and wasted at mine.
194	Central Indiana C. M. C.	1	Rentchler	31,000	30,000		100	900
195	Scranton & Big Muddy Coal Mining Co	1	Marion	30,874	29,674			1,200
196	August Reents	2	Kramm	29,470	28,900		320	250
197	Keystone Big M. C. Co	1	Marion	28,742	26,955		579	1,208
198	Warsaw Coal Co	1	Edwards	28,590	28,351			239
199	West Mine Coal Co	1	Coulterville	28,397	25,580		1,252	1,565
200	Mapleton Coal Co	1	Mapleton	27,843	23,643		1,000	3,200
201	Carroll & Franklin Coun- ties Coal Co	1	Hanaford	27,609	24,965		1,442	1,202
202	Tamaroa & L. M. C. Co.	1	Tamaroa	26,517	25,617		400	500
203	White & Son	1	Belleville	26,401	15,000		10,967	434
204	Greenview Mining Co	1	Greenview	26,022	20,527		4,613	882
205	Brookside Coal Co	1	Troy	25,620	6,000		19,620	
206	Dewey Coal Co	1	Belleville	25,469	24,719		250	500
207	Sunlight Coal Co	1	Freeburg	24,954	23,154		600	1,200
208	Fairbury Coal Co	1	Fairbury	23,812	2,125	13,611	5,000	3,076
209	Norris City Coal Co	1	Norris City	23,780	12,310	5,247	5,140	1,083
210	Vulcan Coal & M. Co	1	Belleville	23,422	23,067			355
211	St. Louis & Ill. Coal Co.	1	Edwardsville	23,028	11,947		10,042	1,039
212	Eastern Coal Co	1	Peoria	23,000	5,250		17,155	595
213	Galatia Coal Co	1	Galatia	22,924	18,000		4,000	924
214	L. Senior		Belleville	21,552	18,752		2,150	650
215	Independent Coal Co	1	Cantine	21,229	9,784			11,445
216	Tice Coal Co	1	Tice	20,500	19,500		500	500
217	Grant Bros	1	Pekin	19,947	4,964		14,603	380
218	Olympia Coal M. Co	1	Edwards	19,800	18,445		100	1,255
219	Streator Fuel Co	1	Streator	19,370	11,937		1,300	6,133
220	Spoon River Coal C	1	Ellisville	18,539	18,256			283
221	Champion Coal Co	1	Pekin	18,406	16,106	1,000	800	500
222	Lancaster L. C. & T. Co.	1	Kingston Mines	18,400	17,270			1,130
223	Mrs. E. Hakes	1	Rutland	17,765	2,759	8,799	4,005	2,202
224	Schmidtgall Coal Co	1	Murphysboro	16,729	10,037		5,755	937
225	Hickory Hill Coal Co	1	Equality	16,608	16,608			

Table 22—Continued.

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	j				Dist	ributlon o	Output—	Tons.
No. of operators.	Name of Operator.	No. of mines.	Location of mine—postoffice.	Total output all grades—tons.	Loaded on cars at mine for shipment	motives	Sold to local trade.	Con- sumed and wasted at mine.
226	Bailey Bros. Coal Co	1	Sunfield	16,220	14,069		1,023	1,128
227	Bushong Bros	1	Muncie	15,849	12,458		2,128	1,263
228	Chi. & Carbondale C. Co.	1	Carbondale	15,478	12,671		58	2,749
229	Peacock Coal Co	1	DeSoto	15,248	14,756		392	100
230	Blue Mound C. M. Co	1	Blue Mound	15,041	10,041		5,000	
231	Fulton County C. Co	1	Sparland	14,102	9,749		3,115	1,238
232	Colfax Co-operative Co	1	Colfax	13,860	3,340	5,012	2,247	3,261
233	Highland Coal Co	_ 1	Belleville	13,435	1,551	223	10,598	1,063
234	Astoria Woodland C. Co.	1	Astoria	13,182	12,567		615	
235	James Higbee	1	Wyoming	12,479	10,075		2,204	200
236	Diamond Fuel Co	1	Sunfield	12,193	10,593		800	800
23	Richland Coal Co	1	Belleville	12,150	9,980		220	1,950
238	Coal Creek Mining Co	1	Fairview	10,280	10,280			
239	German Coal Co	1	Hollis	9,719	7,200		2,169	350
240	Duquoin Coal Co	1	Duquoin	9,618	9,000		250	368
241	Spicer Coal Co	1	Marseilles	9,246	6,411		2,339	496
242	Atlas Coal Co	1	Galva	9,155	1,725		6,630	800
243	New Moon Mining Co	1	Duquoin	8,856	5,854		1,802	1,200
244	Phoenix Coal Co	1	Wesley City	8,557	8,300			257
245	Mt. Pulaski Coal Co	1	Mt. Pulaski	8,487	884		7,063	540
246	F. G. Watts	1	Mt. Vernon	8,485	800		6,915	770
247	Clarke City-Wil. C. Co	1	Clarke City	8,435	7,935		150	350
248	J. R. Riley	1	Breeds	8,000	7,600		400	
249	Volunteer Coal Co	1	Coal Valley	7,753	7,303		150	300
250	South Oakwood Coal Co	1	Oakwood	7,696	7,060		407	229
251	Lacon Coal Co	1	Sparland	7,629	7,029		600	
252	Harmony Coal Co	1	Belleville	7,126	5,340		1,266	520
253	Reeb Coal Co	1	Belleville	6,835	4,545		2,290	
254	Ritchey Coal Co	1	Pinckneyville	6,603	6,343		60	200
255	Barr Coal Co	1	Sparland	6, 295	5,795		500	
256	Donahoo Coal Co	1	Moline	6,000	3,565		2,435	
257	Pittsburg B. M. C. Co	1	Негтіп	6,000	5,000	900		100
.258	Wilson Coal Co	1	Cutler	5,708	5,124		334	250
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Table 22—Concluded.

ໝໍ					Distr	ribution of	Output—7	lons.
No. of operators	Name of Operator.	No. of mines.	Location of mine—postoffice.	Total output all grades— tons.	Loaded on cars at mine for shipment	Supplied to loco-motives at mine chutes.	Sold to local trade.	Con- sumed and wasted at mine.
259	Lovington C. M. Co	1	Lovington	5,520	2,045		1.875	1,600
260	Glendale C. & M. Co	1	Belleville	4,650	3,142		874	634
261	Acme-Wil. Coal Co	1	Braceville	4,378	2,953		925	509
262	Third Vein Coal Co	1	Mapleton	4,000	3,000		200	800
263	T. M. Weeks Coal Co	1	Marissa	3,998	3,898			100
264	Coronado Coal M. Co	1	Mechanicsburg.	3,083	1,652		368	1,063
265	Strait Coal Co	1	Pinckneyville	3,000	2,000		500	500
266	Spillertown C. & C. Co	1	Marion	2,447	1,300			1,147
267	Davenport Mining Co	1	Carrier Mills	2,106	2,071		1	50
268	Nilwood Coal Co	1	Nilwood	1,500	800		500	200

Table 23 shows in contracted form the ownership of the shipping mines of the State. The operators of these mines this year number 268, of these 94.4 per cent were corporations, 2.99 per cent firms and 2.61 per cent individuals.

Table 23—Number of Shipping Mines and Locations with Classification of Ownership, for Six Years.

	Total	Number					
Year.	number of mines.	of locations.	Corpo- rations.	Firms.	Individ- uals.	Total.	
1904	380	175	228	20	25	273	
1905	397	173	242	21	17	250	
1906	419	178	248	21	16	285	
1907	411	180	261	9	6	276	
1908	407	172	251	8	9	268	
1909	384	171	252	7	8	267	
1910	390	185	253	4	7	265	

LOCATION OF ALL MINES.

Table 24 is a list of the location of all the mines of the State arranged alphabetically, giving the name of the county and number of the district in which situated, the number of mines at each locality, also the number of the district in which situated, the number of mines at each locality, also the number of men employed and tons produced.

Table 24—Location of All Mines of the State, Showing County and Districts, Also Number of Mines, Men and Tons—1910.

	Location of Mines—Town or		. ,	Num	ber of—	
No.	Postoffice.	County.	District.	Mines.	Men.	Tons.
	The State	55	10	881	74,634	- 48,717,853
1	Aledo	Mercer	2	3	28	15,894
2	Alexis	Warren	2	2	14	5,535
3	Alsey	Scott	4	3	18	2,681
4	Assumption	Christian	5	1	170	60,781
5	Astoria	Fuiton	2	7	45	19,089
6	Athens	Menard	3	3	234	136,652
7	Atkinson	Henry	2	1	7	1,720
8	Auburn	Sangamon	4	2	445	281,825
9	Augusta	Hancock	4	3	16	10,009
10	Ava	Jackson	10	3	10	3,682
11	Avon	Fulton	2	6	21	3,880
12	Barclay	Sangamon	4	1	149	101,118
13	Bartlett	Peoria	3	2	388	271,024
14	Bartonville	do	3	5	237	172,351
15	Beckemeyer	Clinton	7	1	230	199,278
16	Belleville	St. Clair	8	30	1,723	1,290,146
17	Benton	Franklin	9	2	701	564,904
18	Bethalto	Madison	7	3	18	3,360
19	Birkner	St. Clair	8	1	37	5,791
20	Birmingham	Schuyler	4	3	5	828
21	Bissell	Sangamon	4	1	165	67,688
22	Blandinsville	McDonough	4	1	3	640
23	Bloomington	McLean	3	1	239	88,000
24	Blue Mound	Macon	5	1	30	15,041
25	Bluffs	Scott	4	1	2	196
26	Braceville	Grundy	1	2	442	148,030
27	Braidwood	will	1	2	152	54,567
28	Breeds	Fulton	2	2	14	8,160
29	Breese	Clinton	7	2	525	507, 520

Table 24—Continued.

	Location of Mines—Town or		Number of—					
νo.	Postoffice.	County.	District.	Mines.	Men.	Tons.		
30	Brereton	Fulton	2	1	411	210, 54		
31	Briar Bluff	Henry	2	2	3	40		
32	Brighton	Jersey	6	1	4	1,60		
33	Brimfield	Peoria	3	4	10	3,40		
34	Bryant	Fulton	2	1	2	1,50		
35	Bunker Hill	Macoupin	6	3	20	9,32		
36	Bush	Williamson	10	1	240	185,80		
37	Cable	Mercer	2	3	11	2,99		
38	Cambria	Williamson	10	3	665	460,40		
39	Cambridge	Henry	2	1	13	5,00		
40	Campbell Hill	Jackson	10	2	3	74		
41	Cantine	Madison	7	3	526	596, 9		
42	Canton	Fulton	2	14	559	403,4		
43	Carbon Cliff	Rock Island	2	2	27	10, 2		
44	Carbondale	Jackson	10	4	89	28,2		
45	Carbon Hill	Grundy	1	1	233	83,7		
46	Cardiff	Livingston	3	1	325	166,3		
47	Carlinville	Macoupin	6	1	114	65,9		
48	Carpenter	Madison	7	1	6	8		
49	Carrier Mills	Saline	9	3	473	138,1		
50	Carterville	Williamson	10	7	627	486,9		
51	Caseyville	St. Clair	8	3	865	805,7		
	Catlin	Vermilion	5	5	80	48,9		
	Centralia	Marion	7	4	1,026	731,3		
	Cherry	Bureau	2	1	558	163,0		
	Chesterfield	Macoupin	6	2	10	1,4		
	Chillicothe	Peoria	3	2	7	2,5		
	Christopher	Franklin	9	2	728	675,5		
	Clarke City	Kankakee	1	1	97	8,4		
	Clifford	Williamson	10	1	399	,		
	Clinch	Perry	9	2	615	492,7		
	Coal City	Grundy	1	3	789			
		Rock Island	2	4	72	319,6		
	•		-	-		37,0		
	Colleboster	Montgomery	6	1	217	125,1		
	Colchester	McDonough	. 4	31	110 31	22,1		

Table 24—Continued.

	Location of Mines—Town or			Number of—					
No.	Postoffice.	County.	District.	Mines.	Men.	Tons.			
66	Collinsville	Madison	7	3	406	443,709			
67	Collison	Vermilion	5	1	11	5,000			
68	Colona	Henry	2	1	1	390			
69	Coulterville	Randolph	8	3	209	117,336			
70	Crab Orchard	Williamson	10	2	3	237			
71	Cuba	Fulton	2	27	593	275,335			
72	Cutler	Perry	. 9	2	107	59,804			
73	Dahinda	Knox	2	1	1	40			
74	Dalzeli	Bureau	2	1	622	212, 522			
75	Danville	Vermilion	5	18	818	489, 267			
76	Dawson	Sangamen	4	1	133	93,838			
77	Decatur	Macon	5	4	522	250, 489			
78	Deerpark Glen	LaSalle	1	1	195	90,687			
79	DeSoto	Jackson	10	2	14	16,063			
80	Dewmaine	Williamson	10	1	334	151,890			
81	Divernon	Sangamon	4	1	398	340,531			
82	Donkville	Madison	7	1	318	264.696			
83	Dubois	Washington	7	1	66	16,670			
84	Dunfermline	Fulton	2	2	270	122,273			
85	Duquoin	Perry	9	5	498	302,638			
	Eagle	Saline	o o	1	3	325			
87	Edgemont	St. Clair	8	1	4	2,820			
88	Edinburg	Christian	5	1	12	24,611			
89	Edwards	Peoria	3	7	111	51,016			
90	Edwardsville	Madison	7	3	146	78,645			
91		Saline	9	4	797	519,337			
92		Fulton	2	2	61	21,468			
93	Elmira	Stark	3	1	11	2,000			
94	Elmwood	Peoria	3	1	8	2,354			
95		Gallatin	9	10	150	75,379			
	Exeter	Scott	4	2	7	921			
97		Livingston	3	2	61	33,313			
98	•	Vermilion	5	1	5	2,970			
99		Fulton	2	13	50	16,864			
	Farmersville	Montgomery	6	1	73	51,424			
101		Fulton	2	5	863	439,232			
	Fiatt	dc	2	3	95	63,316			

Table 24—Continued.

	Location of Mines-Town or		Number of—					
No.	Postoffice.	County.	District.	Mines.	Men.	Tons.		
103	Frederick	Schuyler	4	2	6	96		
104	Freeburg	St. Clair	8	7	230	152,01		
105	Galatia	Saline	9	1	48	22,92		
106	Galesburg	Knox	2	1	3	20		
107	Galva	Henry	2	1	27	9,1		
108	Geneseo	do	2	1	7	2,3		
109	Georgetown	Vermilion	5	3	857	719,5		
110	Gilchrist	Mercer	2	1	163	81,7		
111	Gillespie	Macoupin	6	4	1,756	1,951,0		
112	Girard	do	6	1	314	257,5		
113	Glen Carbon	Madison	7	2	484	383,2		
114	Golden Eagle	Calhoun	6	1	14	4,6		
115	Granville	Putnam	1	2	1,100	470,1		
116	Grape Creek	Vermilion	5	2	21	11,2		
117	Greenfield	Greene	6	1	8	4,2		
118	Greenridge	Macoupin	6	1	221	137,0		
119	Greenview	Menard	3	1	36	26,0		
120	Hallidayboro	Jackson	10	1	300	175,6		
121	Hampton	Rock Island	2	2	11	1,1		
122	Hanaford	Franklin	9	1	100	27,6		
123	Hanna City	Peoria	3	4	96	50,7		
124	Harrisburg	Saline	9	9	1,947	1,605,1		
125	Heary	Marshall	3	1	2	2		
126	Herrin	Wiliamson	10	18	3,096	2,246,9		
127	Hillsboro	Montgomery	6	3	634	634,0		
128	Hollis	Peoria	3	1	25	9,7		
129	Industry	McDonough	4	2	15	7		
130	Ipava	Fulton	2	3	7	16,7		
131	Johnston City	Williamson	10	4	961	658,9		
132	Junction	Gallatin	9	1	1	5		
133	Kangley	LaSalle	1	3	11	1,1		
134	Kewanee	Henry	2	16	258	110,5		
135	Kingston Mines	Peoria	3	2	85	33,7		
36	Knoxville	Knox	2	2	11	2,2		
137	Kramm	Peoria	3	2	54	29,4		
138		Bureau	2	1	556	192,6		
130	La Salle	La Salle	1	5	1,305	607.4		

Table 24—Continued.

	Location of Mines—Town or			Num	ber of—	
No.	Postoffice.	County.	District.	Mines.	Men.	Tons.
140	Laura	Peoria	3	1	3	672
141	Lebanon	St. Clair	8	1	16	6,000
142	Ledford	Saline	9	3	831	775,505
143	Lenzburg	St. Clair	8	2	139	116,296
144	Lewiston	Fulton	2	13	40	8,568
145	Lincoln	Logan	3	3	690	467,049
146	Litchfield	Montgomery	6	1	97	36,090
147	Livingston	Madison	7	1	567	613,962
148	London Mills	Fulton	2	1	3	400
149	Lovington	Moultrie	5	1	34	5,540
150	Macomb	McDonough	4	6	17	1,974
151	Maple Mills	Fulton	2	2	7	1,585
152	Mapleton	Peoria	. 3	9	96	37,426
153	Maquon	Knox	2	1	4	1,600
154	Marietta	Fulton	2	1	3	800
155	Marion	Williamson	10	15	1,374	1,181,421
156	Marissa	St. Clair	8	8	527	390,205
157	Marquette	Bureau	2	1	385	137,309
158	Marseilles	LaSalle	1	2	121	35,742
159	Maryville	Madison	7	1	467	373,900
160	 Mascoutah	St. Clair	8	2	91	75,26
161	Mathersville	Mercer	2	2	107	29,048
162	Mathews	Jackson	10	1	2	405
163	Mechanicsburg	Sangamon	4	1	50	3,083
164	Middlegrove	Fulton	2	4	81	47,422
165	Middletown	Menard	3	2	125	69,22
166	Millstadt	St. Clair	8	2	19	9,70
167	Mineral	Bureau	2	1	11	7,200
168	Minonk	Woodford	3	1	176	56,762
169	Missionfield	Vermilion	5	1	127	74,855
	Mitchellville	Saline	. 9	2	4	100
171	Moline	Rock Island	2	4	25	17,000
	Monica	Peoria		1	4	530
	Monmouth	Warren	2	. 2	11	1,280
	Moro	Madison	7	1	6	1,300
175	Morris	Grundy	1	10	70	24,348
	Mt. Olive	Macoupin	6	3	908	744,895

Table 24—Continued.

ю.	Location of Mines—Town or			Numi	er of—	
0.	Postoffice.	County.	District.	Mines.	Men.	Tons.
177	Mt. Pulaski	Logan	3	1	26	8,4
178	Mt. Sterling	Brown	4	2	3	2
179	Mt. Vernon	Jefferson	9	1	35	8,4
180	Moweaqua	Shelby	5	1	125	45,9
181	Muncie	Vermilion	5	1	28	15,8
182	Murphysboro	Jackson	10	7	778	440,0
183	Murrayville	Morgan	4	2	6	1,7
184	Nashville	Washington	7	1	35	6,3
185	New Athens	St. Clair	s	2	61	40,0
186	New Baden	Clinton	7	1	367	294,1
187	New Burnside	Johnson	10	2	6	8
88	New Douglas	Madison	7	1	7	1,3
89	New Windsor	Mercer	2	1	7	1,
90	Nilwood	Macoupin	6	1	10	1,
91	Nokomis	Montgomerv	6	1	132	98,
92	Norris	Fulton	2	2	326	170,
93	Norris City	White	9	1	46	23,
94	North Alton	Madison	7	2	6	1,
95	Oak Hill	Peoria	3	1	2	,
	Oakwood	Vermilion	5	2	51	9,
97	Odin	Marion	7	1	226	151,
98	O'Fallon	St. Clair	s	6	686	449,
99	Oglesby	La Salle	1	1	392	173,
	Oneida	Knox	2	4	14	2,
	Opdyke	Jefferson	9	1	2	2,
	Ottawa	La Salle	1	6	15	1,
03	Pana	Christian	5	4	909	557,
04	Panama	Montgomery	6	1	433	429,
	Paris	Edgar	5	1	4	120)
	Pawnee	Sangamon	4	1	382	354,
	Pekin	Tazewell	3	3	173	99,
	Peoria	Peoria	3	26	524	311,
	Perey	Randolph	s	1	6S	227,
	Peru	LaSalle	1	2	477	171,
	Petersburg	Menard	3	3	SS	41,
	Pinckneyville	Perry	9	6	268	162,
	Pleasant Plaines			2	14	6,3

Table 24—Continued.

NT.	Location of Mines—Town or		Number of—					
No.	Postoffice.	County.	District.	Mines.	Men.	Tons.		
214	Pleasant View	Schuyler	4	3	8	730		
215	Pocahontas	Bond	7	1	149	103,53		
216	Pontiae	Livingston	3	1	22	13,50		
217	Pottstown	Peoria	3	1	4	2,37		
218	Prairietown	Madison	7	1	4	1,07		
219	Preemption	Mercer	2	1	12	2,98		
220	Princeton	Bureau	2	1	4	62		
221	Princeville	Peoria	3	2	15	5,90		
222	Rapatee	Knox	2	3	8	2,92		
223	Ray	Schuyler	4	1	2	86		
224	Raymond	Montgomery	6	1	14	6,25		
225	Rend	Franklin	9	1	223	181,07		
226	Rentchler	St. Clair	8	2	149	61,25		
227	Riverton	Sangamon	4	1	376	360,90		
228	Roanoke	Woodford	3	1	281	113,47		
229	Roseville	Warren	2	3	13	1,89		
230	Royalton	Franklin	9	1	88	57,23		
231	Rushville	Schuyler	4	4	20	8,55		
232	Rutland	La Salle	1	1	74	17,76		
233	St. Augustine	Fulton	2	1	3	90		
234	St. David	do	2	3	321	148,03		
235	St. Johns	Perry	9	1	2	11		
236	St. Libory	Washington	7	1	4	1,76		
237	Saline Mines	Gallatin	9	1	5	56		
238	Salisbury	Sangamon	4	1	3	1,39		
239	Sandoval	Marion	7	2	297	182,04		
240	Seatonville	Bureau	2	1	522	179,70		
241	Selbytown	Sangamon	4	1	130	96,32		
242	Sesser	Franklin	9	1	331	294,14		
243	Shawneetown	Gallatin	9	2	5	77		
244	Sheffield	Bureau	2	5	53	15,93		
245	Shelbyville	Shelby	5	4	55	10,52		
246	Sheldon Grove	Fulton	2	1	2	6		
247	Sherman	Sangamon	. 4	1	403	285,64		
248	Sherrard	Mercer	2	1	196	164,39		
249	Shiloh	St. Clair	8	1	210	157,56		
250	Smithton	do	s	1	1	140		

Table 24—Continued.

	Location of Mines—Town or			Numb	er of-	
No	Postoffice.	County.	District.	Mines.	Men.	Tons.
251	Soperville	Knox	2	2	39	12,1%
252	South Wilmington	Grundy	1	3	903	351,328
253	Sparland	Marshall	3	7	74	29,835
254	Sparta	Randolph	8	7	426	299,960
255	Spaulding	Sangamon	4	1	154	44,848
256	Springfield	do	4	20	3,742	2,732,375
257	Spring Valley	Bureau	2	2	1,282	441,157
258	Staunton	Macoupin	6	5	1,398	842,083
259	Steelton	Vermilion	5	2	642	346,889
260	Stonefort	Williamson	10	3	5	461
261	Stonington	Christian	5	1	199	180,477
262	Streator	LaSalle	1	12	829	393,871
263	Sunfield	Perry	9	2	97	μ. 28,413
264	Sunny Hill	Rock Island	2	1	7	2,15
265	Sweetwater	Menard	3	1	8	2,618
266	Table Grove	Fulton	2	1	3	720
267	Tallula	Menard	3	3	63	41,90
268	Tamaroa	Perry	9	1	86	26,51
269	Taylorville	Christian	5	2	592	493,795
270	Tennessee	McDonough	4	1	6	1,020
271	Thayer	Sangamon	4	1	451	382,54
272	Tice	Menard	3	1	39	20,50
273	Tilden	Randolph	8	3	293	249,929
274	Tiskilwa	Bureau	2	1	7	2,800
275	Toluca	Marshall	3	1	692	234,92
276	Torino	Will	1	1	240	86,01
277	Tower Hill	Shelby	5	1 .	178	97,88
278	Trenton	St. Clair	8	1	234	195,07
279	Troy	Madison	7	3	418	260,65
280	Tunnel Hill	Johnson	10	1	3	20
281	Utica	LaSalle	1	4	12	2,90
282	Vergennes	Jackson	10	1	3	520
283	Vermont	Fulton	2	2	S	1,520
284	Vietoria.:	Knox	2	8	28	5,700
285	Viola	Mercer	2	3	11	3,27
286	Virden	Macoupin	6	3	819	476,07
287	Wataga	Knox	2	4	26	10,26

Table 24—Concluded.

	Location of Mines—Town or		Number of—							
No.	Postoffice.	County.	District.	Mines.	Men.	Tons.				
288	Wenona	Marshall	3	1	274	107,401				
289	Wesley City	Tazewell	3	1	39	8,557				
290	West Frankfort	Franklin	9	1	421	255,805				
291	Westville	Vermilion	5	2	1,000	309,434				
292	White Ash	Williamson	10	1	94	57,652				
293	White Hall	Green	6	1	7	460				
294	Wilderman	St. Clair	8	1	72	18,793				
295	Williamson	Madison	7	1	466	548,220				
296	Willisville	Perry	9	3	354	265,826				
297	Winchester	Scott	4	3	8	1,520				
298	Winkle	Perry	9	1	262	74,480				
299	Witt	Montgomery	6	2	605	430,659				
300	Worden	Madison	7	1	183	107,624				
301	Wyoming	Stark	3	5	70	26,061				
302	Youngstown	Warren	2	1	1	140				

GRADED OUTPUT.

Table 25 shows the total output of coal by districts, divided into the different grades of coal usually known to the trade. The output of the local mines is not distributed by districts.

Table 25—Output of Shipping and Local Mines of the State, with Tons of the Different Grades of Coal, by Districts—1910.

	Total		Tons of	the Differen	t Grades of	Coal-		
Districts.	output— Tons.	Mine run.	Lump.	Egg.	Nut.	Pea or screenings.	Slack or waste	
First	2,818,570	187,897	1,694,464	320,156	16,811	560,765	37,477	
Second	3,555,007	284,443	1,848,554	470,271	108,791	766,371	76,57	
Third	2,573,305	640, 265	1,240,485	60,689	134,333	436,038	61,49	
Fourth	5,076,961	1,111,525	2,055,819	442,029	152,370	1,193,730	121,488	
Fifth	3,540,393	1,626,127	1,068,068	55,133	109,816	603,182	78,063	
Sixth	5,834,289	819,379	3,213,486	264,149	75,923	1,370,064	91,288	
Seventh	5,817,192	668,792	2,809,089	405,647	236,592	1,205,426	491,646	
Eighth	4,892,326	1,281,294	2,526,738	40,925	251,004	683,071	109,29	
Ninth	6,612,298	1,371,332	2,113,457	690,739	632,190	1,713,081	91,499	
Tenth	6,504,860	1,499,205	1,561,311	575,120	1,087,773	_1,586,626	194,823	
Shipping mines	47,225,201	9,490,259	20,131,471	3,325,858	2,805,603	10,118,354	1,353,656	
Local mines	1,492,652	730,197	638,459	8,201	41,090	56,323	18,382	
Total	48,717,853	10,220,456	20,769,930	3,334,059	2,846,693	10,174,677	1,372,038	

Table 26 represents the percentages of the total output of shipping mines by districts, divided into percentages of different grades of coal known to the trade. The percentages of the different grades of coal of the local mines are shown at the bottom of this table, but are not divided into districts.

Table 26—Percentages of Total Output of the Different Grades of Coal, Shipping and Local Mines, by Districts—1910.

	Percent	Percentages of the Different Grades of Coal.										
Districts.	of total output.	Mine run.	Lump.	Egg.	Nut.	Pea.	Slack or waste.					
First	5.97	6.77	60.12	11.28	.60	19.90	1.33					
Second	7.53	8.00	52.00	13.23	3.06	21.56	2.15					
Third	5.45	24.88	48.21	2.36	5.22	16.94	2.39					
Fourth	10.75	21.90	40.49	8.71	3.00	23.51	2.39					
Fifth	7.50	45.93	30.17	1.56	3.10	17.04	2.20					
Sixth	12.35	- 14.04	55.08	4.53	1.30	23.48	1.57					
Seventh	12.32	11.50	48.29	6.97	4.07	20.72	8.45					
Eighth	10.35	26.19	51.65	.84	5.13	13.96	2.23					
Ninth	14.00	20.74	31,96	10.45	9.56	25,91	1.38					
Tenth	13.78	23.05	24.00	8.84	16.72	24.39	3.00					
Shipping mines	100.00	20.09	42.63	7.04	5.94	21.43	2.87					
Local mines	100.00	48.92	42.78	.55	2.75	3.77	1.23					

Table 27 presents the total tonnage of each year of all mines for a peries of eleven years, with the tons of each grade. Following the totals shown are the percentages of each grade for the same years.

The percentage of lump coal reported for this year is 1.47 per cent less than for last year, and is also less than for any previous year shown in

this table.

The percentage of mine run has increased 3.25 per cent over last year, while all the other grades have decreased.

Table 27—Total Output of the Different Grades of Coal, All Mines, for Eleven Years with Percentages.

	Total		Tons of t	he Different	Grades of Co	al.		
Year.	output— tons.	Mine run.	Lump.	Egg.	Nut.	Pea.	Slack or waste.	
1900	25,153,929	5,554,417	13,927,899	495,637	1,323,582	2,811,520	1,040,874	
1901	26,635,319	6,882,740	13,321,124	486,596	1,217,127	3,217,127	1,060,141	
1902	30,021,300	6,986,204	15,041,673	680,985	1,586,456	4,604,232	1,121,750	
1993	34, 955, 400	10,373,097	15, 874, 509	995,163	1,755,704	4,540,431	1,416,195	
1904	37,077,897	10,627,904	16,888,010	1,014,700	1,602,383	5,751,570	1,193,330	
1905	37,183,374	9,248,558	16,819,321	1,716,219	2,036,152	6,247,511	1,115,613	
1906	38,317,581	9,777,905	16,878,088	1,850,427	1,931,988	6,622,087	1,257,086	
1907	47,798,621	11,628,302	20,599,509	2,469,442	2,625,306	9,138,044	1,338,018	
1908	49,272,452	11,224,540	21,166,563	2,594,336	2,788,120	9,640,914	1,857,979	
1909	49,163,710	8,715,759	21,680,602	3,444,612	2,944,036	10,587,057	1,791,644	
1910	48,717,853	10,220,456	20,769,930	3,334,059	2,846,693	10,174,677	1,372,038	
Percentages— 1900		22.08	55.37	1.97	5.26	11.18	4.1-	
1901		25.84	50.01	1.83	4.57	13.77	3.98	
1902		23.27	50.10	2.27	5.28	15.34	3.7	
1903		29.70	45,41	2.84	5.02	12.98	4.08	
1904		28.66	45.55	2.73	4.32	15.51	3.23	
1905		24.87	45.23	4.62	5.48	16.80	3.00	
1906		25.52	44.04	4.83	5.04	17.28	3.29	
1907		24.33	43.09	5.17	5.49	19.12	2.80	
1908		22.78	42.96	5.27	5.66	19.57	3.76	
1909		17.73	44.10	7.01	5.99	21.53	3.6	
1910		20.98	42.63	6.84	5.84	20.89	2.8	

MINES, MEN AND TONS.

Table 28 presents an abridged record of the coal industry of the State for the past twenty-nine years; giving the number of counties in which coal is produced; the number of mines, men and tons, with a division of the total output into tons of lump coal and other grades, also the per-

centages of each grade of coal since 1890. The percentage of lump coal is less this year than for any previous year shown in this table. The number of mines reported is less than shown for any of the last ten years, and is five less than last year.

During the time represented in this table the number of men has increased 372 per cent, while the total tonnage has increased 442 per cent. There was an increase of men this year over last, while there was

a slight decrease in tons produced.

Table 28—Output of the State for Twenty-nine Years and the Mines and Men Producing the Same.

		Nı	ımber of—		Tons	Tons of—			
Year.	Coun- ties.	Mines.	Men.	Tons.	Lump.	Other grades.	Lump.	Other grades.	
1882	42	704	20,290	11,017,069	9,115,653	1,901,506			
1883	47	639	23,939	12,123,456	10,030,991		· · · · · · · ·		
1884	49	741	25,575	12,208,075	10,101,005	2,107,070			
1885	50	778	25,946	11,834,459	9,791,874	2,402,585			
1886	50	787	25,846	11,175,241	9,246,435	1,928,806			
1887	49	801	26,804	12,423,066	10,278,890	2,144,176			
1888	50	822	29,410	14,328,181	11,855,188	2,472,993			
1889	49	854	30,076	14,017,298	11,597,963	2,419,335			
1890	57	936	28,574	15,274,727	12,638,364	2,636,363	82.74	17.26	
1891	57	918	32,951	15,660,698	12,960,224	2,700,474	82.76	17.24	
1892	55	839	33,632	17,862,276	14,730,963	3,131,313	82.47	17.53	
1893	56	788	35,390	19,949,564	16,112,899	3,836,665	80.77	19:23	
1894	56	836	38,477	17,113,576	13,865,284	3,248,292	\$1.02	18.98	
1895	54	874	38,630	17,735,864	14,045,962	3,689,902	79.25	20.75	
1896	. 51	901	37,057	19,786,626	14,210,024	5,576,602	71.86	28.14	
1897	50	853	33,788	20,072,758	14,672,241	5,400,517	73.10	26.90	
1898	52	881	35,026	18,599,299	14,208,795	4,390,504	76.39	23.61	
1899	52	889	36,991	23, 434, 454	17,427,598	6,006,847	74.37	25.63	
1900	52	920	39,384	25,153,929	13,927,899	11,226,030	44.63	55.37	
1901	53	915	44,143	26,635,319	13,321,124	13,314,195	50.01	49.99	
1902	54	915	46,005	30,021,300	15,041,673	14,979,627	50.10	49.90	
1903	53	933	49,814	34,955,400	15,874,509	19,080,891	45.41	54.59	
1904	54	932	54,774	37,077,897	16,888,010	20, 189, 887	45.55	54.45	
1905	56	990	59,230	37,183,374	16,819,321	20,364,053	45.23	54.77	
1906	54	1,018	62,283	38,317,581	16,878,088	21,439,493	44.05	55.95	
1907	55	933	66,714	47,798,621	20,599,509	27,199,112	43.10	56.90	
1908	54	922	70,841	49, 272, 452	21,166,563	28,105,889	42.96	57.04	
1909	55	886	72,733	49,163,710	21,680,602	27, 483, 108	44.10	55.90	
1910	55	881	74,634	48,717,853	20,769,930	27,947,923	42.63	57.37	

Table 29 presents the total number of men employed, and the tons of coal produced for the past twenty-nine years. During the past twelve years the number of men employed shows an increase each year, the increase for the present year being 2.61 per cent while the tons produced, with the exception of two years, last year and this, has shown an increase for eleven years, the decrease for the present year was ninety-one, one hundredths of one per cent.

Table 29—Total Number of Men and Total Tons Produced with Percentages of Gain or Loss for Twenty-nine Years.

37	Mani	Total output-	Percenta	ge of Men.	Percentag	ge of Tons.
Year.	Men.	tons.	Gain.	Loss.	Gain.	Loss.
1882	20,290	11,017,069				
1 SS3	23,939	12,132,451	17.98		10.04	
1884	25,575	12,208,075	6,83		.70	
885		11,834,459	1.45			3.0
1886	15,846	11,175,241		.32		5.5
1887	26,804	12,423,066	3.71		11.17	
1888	29,410	14,328,181	9.72		15.34	
1889	30,076	14,017,298	2.26			2.1
1890	28,574	15,274,727		5.00	8.97	
1891	32,951	15,660,698	15.31		3.53	
1892	33,632	17,862,276	2.07		14.06	
1893	35,390	19,949,564	5.23		11.69	
1894	38,477	17,113,576	8.72			14.2
1895	38,630	17,735,864	.40		3.64	
1896	37,057	19,786,626		4.07	11.56	
1897	33,788	20,072,758		8.82	1.45	
1898	35,026	18,599,299	3.66			7.3
1899	36,991	23,434,445	5.61		26,00	
1900	39,384	25,153,929	6.47		7.34	
1901	44,143	26,635,319	12.08		5.89	
1902	46,005	30,021,300	4.21		12.71	
1903	49,814	34,955,400	8.28		16.44	
1904	54,774	37,077,897	9.96		6.07	
1905	59,230	37,183,374	8.14		.28	
1906	62,283	38,317,581	5.15		3.05	
1907			7.11		24.74	
1908	70,841	49,272,452	6.19	·	3.08	
1909	72,733	49,163,710	2.67			.25
1910	74,634	48,717,853	2.61			.99

OUTPUT OF

Table 30 gives the output of coal, of all shipping mines for each month. This is the fifth year this record has been presented. The last five lines

Table 30-Total Output of Shipping Mines, Produced in Each Calendar

			1909-	Output for	the Mont	hs of—	
Counties and Districts.	Total tons.	July.	August.	September.	October.	November.	December.
Grundy	902,804	74,997	76,978	90,188	110,465	110,580	105,05
Kankakee	8,435	1,840	1,380	2,300	2,110	805	
LaSalle	1,302,348	95,400	104,510	131,826	158,392	147,648	155,28
Putnam	470,132	46,884	49,409	54,473	58,565	55,767	48,74
Will	134,851	8,599	12,166	12,546	15,551	14,040	16,83
First District	2,818,570	227,720	244,443	291,333	345,083	328,840	325,92
Bureau	1,326,430	108,807	128,536	148,496	179,101	154,585	140,88
Fulton	1,867,017	100,443	113,078	135,011	248,378	227,908	213,86
Henry	78,570	5,154	5,567	6,811	8,034	7,119	9,44
Mercer	275,237	25,839	27,641	25,772	32,773	30,064	32,59
Rock Island	7,753	123	523	708	961	1,116	94-
Second District	3,555,007	240,366	275,345	316,798	469,247	420,792	397,736
Livingston	190,207	14,880	13,797	19,053	19,328	22,665	21,18
Logan	475,536	18,214	32,794	51,491	60,901	55,372	53,47
McLean	101,860	7,696	8,628	10,731	13,004	9,404	13,192
Marshall	370,354	34,025	36,462	41,548	43,365	39,567	44,578
Menard	321,443	15,815	14,078	25,679	30,754	39,246	40,950
Peoria	799,994	45,294	49,726	65,646	86,194	83,926	97,678
Stark	12,479				484	660	1,18
Tazewell	131,197	7,781	8,076	11,274	14,573	13,888	15,741
Woodford	170,235	14,312	16,820	16,674	20,844	18,940	20,326
Third District	2,573,305	158,017	180,381	242,096	289,447	283,668	308,305
Sangamon	5,076,961	338,051	387,611	505,170	570,060	627,832	587,032
Fourth District	5,076,961	338,051	387,611	505,170	570,060	627,832	587,032
€hristian	1,292,876	64,757	66,990	106,214	152,529	157,227	157,668
Macon	265,530	13,206	22,316	28,118	32,332	26,371	31,752
Moultrie	5,520	1,440	1,440	1,380	1,260		
Shelby	143,867	4,477	8,268	4,987	16,932	17,029	17,139
Vermilion	1,832,600	117,827	133,226	147,658	177,953	189,538	209,497
Fifth District	3,540,393	201,707	232,240	288,357	381,006	390,165	416,051

SHIPPING MINES.

during the fiscal year. The table is arranged by counties and districts. of the table give the totals for each month during the five years:

Month, by Counties and Districts, from July 1, 1909, to June 30, 1910.

	1910					
January.	Februa y.	March.	April.	May.	June.	Counties and Districts.
109,403	105,972	118,390			775	Grundy
						Kankakee
161,159	155,112	167,361	7,301	8,242	10,110	LaSalle
49,956	42,727	63,607				Putnam
17,621	17,689	19,803				Will
338,139	321,500	369,161	7,301	8,242	10,885	First District
152,653	145,514	167, So4				Bureau
264,047	248,312	310,322	1,568	1,688	2,400	Fulton
9,934	9,210	9,907	725	530	6,130	Henry
31,508	32,616	36,427				Mercer
740	1,036	1,602				Rock Island
458,882	436,688	526,112	2,293	2,218	8,530	Second District
25,131	27,541	26,625				Livingston
65,156	64,161	73,024				Logan
13,966	12,332	12,486				McLean
44,071	41,467	45, 271				Marshall
45,394	47,077	51,043		2,749	· ·	Menard
110,985	102, 471	118,197	8,844	13,442		Peoria
1,260	1,093	1,796		1,933		Stark
18,468	18,671	21,636			1,089	Tazewell
20,803	20,738	20,778				Woodford
345,234	335,551	370,856	11,939	18,124	29,687	Third District
643,080	635,186	759,610		1,822	21,507	Sangamon
643,080	635,186	759,610		1,822	21,507	Fourth District
173,584	185,376	228,536				Christian
35,966	36,256	39,213				Macon
55,900	30,230	09,210				Moultrie
26,799	23,810	24,426				Shelby
240,548	242,038	24,420		837	102,028	Vermilion
476,897	487,480	563,625		837	102,028	Fifth District
410,891	457,450	500,025		301	102,028	- Hell Disvince

Table 30-

-							
			1909-	Output for	the Month	s of-	
Counties and Districts.	Total tons.	July.	August.	September.	October.	November.	December.
Macoupin	4,029,606	338,819	361,881	419,087	436,652	445,631	364,285
Montgomery	1,804,683	113,320	120,365	140,423	192,151	230,501	218,448
Sixth District	5,834,289	452,139	482,246	559,510	628,803	676,132	582,733
Bond	103,537	5,780	6,212	10,299	11,023	8,915	9,874
Madison	1,000,935 3,647,452	73,088	81,995	95,695	116,195	99,850	108,013
Marion	1,065,268	232,419 88,986	271,949 93,376	334,555 92,587	396,657 104,132	351,727 118,126	390,899 135,317
Seventh District		400,273	453,532	533,136	628,007	578,618	644,103
Seventia District sessess	5,517,132	400,210	400,002		020,001	010,010	011,100
Randolph	831,428	49,202	55,094	82,232	90,714	80,491	77,064
St. Clair	4,060,898	219,598	219,661	261,388	361,372	351,339	435,149
Eighth District	4,892,326	268,800	274,755	343,620	452,086	431,830	512,213
Franklin	_,,	173,346	201,334	226, 525	245,802	232,689	238,442
Gallatin	/	4,131	5,840	5,796	8,469	5,845	7,943
Jefferson	8,485				835	852	1,375
Perry	1,384,810	96,647	115,532	136,908	147,750	131,781	143,391
Saline	3,055,065	253,354	258,700	294,901	338,959	347,584	340,354
White		1,923	2,104	2,216	2,724	2,641	2,505
Ninth District	6,612,298	529,401	583,510	666,346	744,539	721,392	734,010
Jackson	646,447	45,622	57,827	74,196	76,830	75,615	73,295
Williamson	5,858,413	442,235	567,493	592,178	650,278	684,198	661,213
Tenth District	6,504,860	487,857	625,320	666,374	727,108	759,813	734,508
The State 1910	47,225,201	3,304,331	3,739,383	4,412,740	5,235,286	5,219,082	5,242,614
The State 1909	47,958,562	2,978,427	3,809,419	4,298,981	5,019,764	4,523,011	4,748,402
The State 1908	47,809,730	3,544,763	4,112,544	4,222,617	5,279,014	5,097,806	4,837,077
The State 1907	46, 436, 839	2,884,310	3,244,518	3,478,829	4,282,628	4,343,762	4,613,382
The State 1906	37,096,945	1,891,717	2,840,419	3,117,045	3,578,312	3,880,503	4,178,029

Concluded.

	1910	Output for	the Months	of-		
January.	February.	February. March.		May.	June.	Counties and Districts.
410,236	433,492	574,094		7,042	238,387	Macoupin
218,829	219,767	283,070		477	67,332	Montgomery
629,065	653,259	857,164		7,519	305,719	Sixth District
13,153	12,067	16,384			9,830	Bond
119,383	98,714	133,459		810	73,733	Clinton
406,360	406,390	505,995	475	13,687	336,339	Madison
133,735	128,045	170,964				Marion
672,631	645,216	826,802	475	14,497	419,902	Seventh District
78,586	84,665	124,817		4,341	104,222	Randolph
519,334	503,916	655, 207	1,698	38,961	493,275	St. Clair
597,920	588,581	780,024	1,698	43,302	597,497	Eighth District
230,866	213,585	297,608			10,946	Franklin
9,190	8,825	11,014		460	1,502	Gallatin
1,442	1,349	1,232			1,400	Jefferson
145,848	155,252	218,595	260	7,660	85,186	Perry
396,547	370,066	454,600				Saline
2,284	3,266	4,117				White
786,177	752,343	987,166	260	8,120	99,034	Ninth District
73,199	60,387	92,911		190	16,375	Jackson
701,272	635,749	892,971		4,791	26,035	Williamson
774,471	696,136	985,882		4,981	42,410	Tenth District
5,722,496	5,551,940	7,026,402	23,966	109,662	1,637,199	The State 1910
4,641,015	4,107,510	4,148,613	3,470,361	3,145,748	3,067,311	The State 1909
4,408,282	4,566,526	6,055,194	1,400,640	2,081,853	3,463,414	The State 1908
4,852,163	4,254,985	3,731,138	3,572,474	3,784,770	3,393,880	The State 1907
4,288,706	4,336,350	5,378,459	392,382	659,019	2,556,004	The State 1906

Table 31 presents the total output of shipping mines and average June 30, 1910. The month in which the largest output was produced in any other month, January showing the next largest tonnage, April month no mine in the fourth, fifth, sixth or tenth districts worked. At the past five years.

Table 31—Recapitulation of Table 30—Total Output of Shipping
Days Worked Each Month, by Districts,

		July.		August.		September.		October.		November.		D	December,	
Districts.	Total tons for nine months.	Average days.	Tons.											
First	2,792,142	21	227,720	15	244,443	22	291,333	24	345,083	22	328,840	24	325,923	
Second	3,541,966	14	240,366	18	275,345	20	316,798	23	469,247	21	420,792	20	397,736	
Third	2,513,555	15	158,017	14	180,381	19	242,096	21	289,447	21	283,668	22	308,305	
Fourth	5,053,632	13	338,051	15	387,611	19	505,170	20	570,060	21	627,832	19	587,032	
$Fifth\dots\dots\dots$	3,437,528	14	201,707	16	232, 240	16	288,357	20	381,006	19	390,165	20	416,051	
Sixth	5,521,051	15	452,139	17	482,246	19	559,510	21	628,803	22	676,132	21	582,733	
Seventh	5,382,318	18	400,273	17	453,532	19	533,136	21	628,007	18	578,619	21	644,103	
Eighth	4,249,839	9	268,800	16	274,755	16	343,620	18	452,086	17	431,830	19	512,213	
Ninth	6,504,884	17	529,401	18	583,510	18	666,346	20	744,539	19	721,392	20	734,010	
Tenth	6, 457, 469	13	489,857	17	625,320	17	666,374	17	727,108	18	759,813	19	734,508	
The State, 1910	45, 454, 384		3,304,331		3,739,383		4,412,740		5,235,286		5,219,082		5,242,614	
The State, 1909	47,958,562		2,978,427	٠.	3,809,419		4,298,981		5,019,764	ļ	4,523,011		4,748,402	
The State, 1908	47,809,730		3,544,763		4,112,544		4,222,617		5,279,014		5,097,806		4,837,077	
The State, 1907	46, 436, 839		2,884,310		3,244.518		3,478,829		4,282,628		4,343,762		4,613,382	
The State, 1906	37,096,945		1,891,717		2,840,419		3,117,045		3,578,312		3,880,503		4,178,029	

MINES.

days produced in each calendar month by districts from July 1, 1909 to is shown to be March, when there was 1,303,906 tons more produced than produced the least number of tons being only 23,966 tons but in this the bottom of this table is shown the tonnage of the State by month, for

Mines Produced in Each Calendar Month, with Average Number of from July 1, 1909, to June 30, 1910.

J	anuary.	uary. February.		ebruary. March.		nine months.		April.		May.		June.	e months.		
Average days.	Tons.	Average days.	Tons.	Average days.	Tons.	Average days for nine	Average days.	Tons.	Average days.	Tons.	A verage days.	Tons.	Average days for three months.	Total tons for three months.	Districts.
24	338,139	23	321,500	25	369,161	200	24	7,301	30	8,242	28	10,885	21	26,428	First
23	458,882	22	436,688	26	526,112	180	18	2,293	20	2,218	24	8,530	21	13,041	Second
24	345, 234	22	335, 551	24	370,856	186	18	11,939	23	18,124	22	29,687	21	59,740	Third
22	643,080	20	635,186	25	759,610	169			4	1,822	8	21,507	5	23,329	Fourth
21	476,897	22	487,480	25	563,625	164			13	837	22	102,028	24	102,865	Fifth
20	629,065	20	653,259	25	857,164	182	٠.		2	7,513	20	305,719	12	313,238	Sixth
22	679,631	21	645,216	25	826,802	174	5	475	4	14,497	13	419,902	10	434,874	Seventh
19	597,920	19	588,581	23	780,024	165	2	1,698	3	43,302	21	597,497	20	642,497	Eighth
20	786,177	19	752,343	24	987,166	167	13	260	5	8,120	21	99,034	15	107,414	Ninth
17	774,471	17	696,136	23	985,882	160	-:		3	4,981	17	42,410	13	47,391	Tenth
	5,722,496		5,551,940		7,026,402	173		23,966		109,662		1,637,199	18	1,770,817	TheState 1910
															TheState 1909
	4,408,282		4,566,526		6,055,194			1,400,640	٠.	2,081,853		3,463,414			The State 1908
	4,852,163		4,254,985		3,731,138			3,572,474	٠.	3,784,770		3,393,880			TheState 1907
	4,288,706		4,336,350	• •	5,378,459	• • •		392,382		659,019		2,556,004			TheState1906

Table 32 gives the percentages of the tonnage of coal produced each month by districts during the fiscal year. The largest monthly per cent of output of all districts was 14.88 per cent produced in the month of March, this was 2.76 per cent higher than any other month, the next largest output being in the month of January when 12.12 per cent of the total output was produced.

At the bottom of this table you will also find the per cent produced

each month in the State for the four previous years.

Table 32—Percentages of Total Output Mined in Each Month, by Districts.

	Percen	tages o	of the T	otal O	utputl	dineá i	n Eacl	n Distr	ict Du	ring th	e Mont	h of—	
			196	09.			1910.						
Districts.	July.	August.	September.	October. November. December.		January.	Februa, y.	March.	April.	Мау.	June.		
First	8.08	8.67	10.34	12.24	11.67	11.56	12.00	11.41	13.10	.26	.29	.38	
Second	6.76	7.75	8.91	13,20	11.84	11,19	12.91	12.28	14.80	.06	.06	.24	
Third	6.14	7.01	9.41	11.25	11.02	11.98	13.42	13.04	14.41	.46	.71	1.15	
Fourth	6.66	7.63	9.95	11.23	12.37	11.56	12.67	12.51	14.96		.04	.42	
Fifth	5.70	6.56	8.15	10.76	11.02	11.75	13.47	13.77	15.92		.02	2.88	
Sixth	7.75	8.26	9.59	10.78	11.59	9.99	10.78	11.20	14.69		.13	5.24	
Seventh	6.88	7,80	9.16	10.80	9.95	11.07	11.56	11.09	14.21	.01	.25	7.22	
Eighth	5.49	5.62	7.02	9.24	8.83	10.47	12.22	12.03	15.94	.04	.89	12.21	
Ninth	8.00	8.82	10.08	11.26	10.91	11.10	11.89	11.30	14.93	.01	.12	1.50	
Tenth	7.50	9.61	10.24	11.18	11.68	11.29	11.91	10.70	15.16		.08	.65	
The State, 1910	7.00	7.92	9.34	11.08	11.05	11,10	12.12	11.76	14.88	.05	.23	3.47	
The State, 1909	6.21	7.94	8.96	10.47	9.43	9,90	9.68	8.56	8,65	7.24	6.56	6.40	
The State, 1908	7.41	8.60	8,83	11.04	10.67	10,12	9.22	9.55	12.67	0.29	4.38	7.22	
The State, 1907	6.21	6.99	7.49	9.22	9.35	9.44	10.45	9 16	8.04	7,69	8,15	7.31	
The State, 1906	5.10	7,66	8.40	9.64	10.46	11.26	11.56	11.69	14.50	1.06	1.78	6.89	

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Table 33 presents by districts, the total tons and the percentages of the tonnage each of the six months of the fiscal year, and at the bottom of the table the total tons and percentages for the State of each six months, for the past five years. The tonnage here shown is for shipping mines only. This table shows that 57.5 per cent of all eoal from this class of mines was produced in the six months ending December 31.

Table 33—Tons and Percentages of Output for the First and Second Six Months of the Fiscal Year—1910.

Districts.	Total Output	Output Six July 1, to Dec		Output Six Months. Jan. 1, to June 30, 1910.		
	Tons-	Tons.	Per cent.	Tons.	Per cent	
First	2,818,570	1,763,342	62.56	1,055,228	37.44	
Second	3,555,007	2, 120, 284	59.64	1,434,723	40,36	
Thicd	2,573,305	1,461,914	56.81	1,111,391	43.19	
Fourth	5,076,961	3,015,756	59.40	2,061,205	40.60	
Fifth	3,540,393	1,909,526	53,94	1,630,867	46.06	
Sixth	5,834,289	3,381,563	57.96	2, 452, 726	42.04	
Seventh	5,817,192	3,237,669	55.66	2,579,523	44,34	
Eighth	4,892,326	2,283,304	46.67	2,609,022	53.33	
Ninth	6,612,298	3,979,198	60.18	2,633,100	39.82	
Tenth	6,504,860	4,000,980	41.51	2,503,880	38,46	
The State, 1910	47, 225, 201	27,153,536	57.50	20,071,665	42.50	
The State, 1909.,	47,958,562	25,377,999	52.92	22, 580, 563	47.08	
The State, 1908	47,809,730	27,093,821	56,67	20,715,909	43,33	
The State, 1907	46, 436, 839	22,847,429	49.20	23,589,410	50,80	
The State, 1906	37,096,945	19,486,025	52.53	17,610,920	47 47	

HAULING IN SHIPPING MINES.

Table 34 is a condensed showing of the underground methods of haulage in the shipping mines of the State. The use of motors in the mines of the State has increased by ten mines this year over last, and shows an increase of thirty-one over 1907. The number of motors reported for this year is 229 this is 19 more than shown for last year and 100 more than for the year 1907. All the motors in use during the past year were electric, excepting seven; these were four compressed air and three gasoline. The proportion of the tons hauled by the several methods was by motors 49.1 per cent; by cable 5.3 per cent; by mules 45. per cent; and by hand six-tenths of one per cent. The tons hauled by motor power was 3.5 per cent more than last year, and the tons hauled by cable was 2.4 per cent more than last year, there was a decrease of haulage by mule of 6.4 per cent while there was an increase in haulage by hand of five-tenths of one per cent.

Table 34—Haulage of Coal in the Shipping Mines of the State, by Districts.

			Motors	s.		Cable.		Mule.	Hand.	
Districts.	Number of mines.	No. Kind.		Tons.	Number of mines.	Tons.	Number of mines.	Tons,	Number of mines.	Tons.
First	1	2	Electric	173,112	5	500,115	22	2,136,908	1	8,435
Second	5	11	do	746,747	5	455, 434	26	2,343,671	1	9,155
Third	9	17	do	831,725	5	355, 445	31	1,373,656	1	12, 479
Fourth	6	12	do	1,638,053	2	176,582	19	3,092,006	4	170,326
Fifth	14	33	do	2,535,096	2	204,166	14	801,131		
Sixth	11	28	*Electric	3,404,655	1	245,780	15	2,183,854		
Seventh	15	41	Electric	4,331,125			13	1,486,067		
Eighth	12	17	†Electric	1,566,586			52	3,257,388	1.	68,352
Ninth	19	37	Electric	4,696,776	1	52,407	29	1,863,115		
Tenth	14	31	do	3,280,605	4	518,414	30	2,705,841		
The State, 1910	106	229		23, 204, 480	25	2,508,343	251	21,243,637	8	268,741
The State, 1909	96	210		21,892,462	16	1,396,154	268	24,645,398	4	24,548
The State, 1908	88	185		19,024,665	32	3,273,753	283	25, 482, 634	4	28,678
The State, 1907	75	129		16,542,575	25	2,864,241	303	26,689,533	5	46,865

^{*} Four compressed air.

[†] Three gasoline.

Table 35 is a detailed list arranged by districts of shipping mines employing motor haulage, giving the location, names, and number of motors, and the tons hauled. The changes of the counties in several districts, heretofore noted, has considerable bearing this year in the location of motors and tons hauled by districts. The seventh district with the largest number of motors that being 41 produced 4,331,125 tons, while the ninth district with 37 motors, being the next largest number of motors, produced 4,696,776 tons or 365,651 tons more than the seventh district, this being the largest tonnage for any one district during the year.

Table 35—Shipping Mines Using Motor Haulage, with Name and Number of Motors in Use, Kind in Use and Tons Hauled—1910.

	District and Operator.	Location.	Motors.		Tonnage.
			Name.	Kind.	
	The State—106 mines		229 motors		23, 204, 480
	First District-1 mine				
	Oglesby Coal Co	Oglesby	2 Goodman	Electric	173,112
	Second District—5 mines		11 motors		746,747
1	Marquette 3d Vein Coal Co	Marquette	2 Goodman	Electric	137,309
2	Monmouth Coal Co., No. 1	Brereton	2 Goodman	do	210,549
3	Big Creek Coal Co., No. 2	St. David	1 Jeffrey; 1 Goodman	do	144,570
4	Maplewood Coal Co., No. 1	Farmington	2 Westinghouse; 1 Jef- frey	do	132,346
5	Big Creek Coal Co., No. 4	Dunfermline	2 Jeffrey	do	121,973
	Third District—9 mines		17 motors		831,725
1	Toluca Coal Co	Toluca	3 Westinghouse; 2 Good- man	Electric	234,927
2	Athens Mining Co	Athens	1 Goodman	do	52,077
3	Clarke Coal & Coke Co., No. 2	Bartlett	3 Goodman	do	148,735
4	Clarke Coal & Coke Co., No. 1	do	2 Goodman	do	122,289
5	Sholl Bros	Bartonville	1 Morgan-Gardner	do	76,669
6	Wolschlag Co-op. Coal Co	Peoria	1 Jeffrey; 1 Goodman	do	72,837
7	Crescent Coal Co	do	1 Goodman	do	55,483
8	Newsam Bros., Kingston	do	1 Goodman	do	48,908
9	Olympia Coal Mining Co	Edwards	1 Jeffery	do	19,800

Table 35—Continued.

-					
	District and Operator.	Location.	Motors.		Tonnage.
_	_		Name.	Kind.	
	Fourth District—6 mines		12 motors		1,638,053
1	Chi., Wilm. & Ver. C. Co., No. 1	Thayer	2 Goodman; 2 Morgan- Gardner	Electric	382,540
2	Springfield Coal Mining Co	Riverton	2 Goodman	do	360,906
3	Jones & Adams Coal Co	Springfield	1 Jeffrey	do	348,940
4	Madison Coal Corp., No. 6	Divernon	2 Goodman	do	340,531
5	West End Coal Co	Springfield	1 Goodman; 1 Jeffrey	do	136,618
6	Dickerson Coal Co	do	1 Goodman	do	68,518
	Fifth District—14 mines		33 motors		2,535,096
1	Christian County Coal Co	Taylorville	1 Goodman	Electric	284,579
2	Springfield Coal. M. Co., No. 6	do	2 Goodman	do	209,213
3	Pana Coal Co., No. 1	Pana	2 Goodman	do	184,538
4	Penwell Coal Mining Co	do	3 Goodman	do	154,170
5	Smith-Lohr Coal Co	do	2 Jeffrey	do	129,454
6	Pana Coal Co., No. 2	do	2 Goodman	do	89,664
7	Assumption Coal Co	Assumption	1 Goodman	do	60,781
8	Moweaqua C. M. & Mfg. Co	Moweaqua	1 Goodman	do	45,982
9	Bunsen Coal Co., L. V	Georgetown	5 Jeffery	do	505,519
10	Brazil Block Coal Co., No. 3	Steelton	1 Westinghouse; 2 Mor- gan-Gardner	do	302,898
11	Bunsen Coal Co., No. 4	Georgetown	1 Goodman; 2 General Electric	do	201,039
12	Brazil Block Coal Co., No. 2	Westville	2 Westinghouse; 1 Morgan-Gardner	do	183,907
13	Brazil Block Coal Co., No. 44	do	1 Goodman; 2 Jeffrey	do	125,527
14	Bunsen Coal Co., No. 2	Danville	2 Goodman	do	57,825

Table 35—Continued.

_	District and Operator.	Location.	Motors.		Tonnage.
			Name.	Kind.	= 011-ugo
	Sixth District—11 mines		28 motors		3,404,655
1	Superior Coal Co., No. 3	Gillespie	3 Jeffrey	Electric	693,029
2	Superior Coal Co., No. 2	do	3 Jeffery	do	671,484
3	Superior Coal Co., No. 1	do	4 Porter; 2 Jeffrey	Com. Air, Electric	545,278
4	Girard Coal Co., No. 5	Girard	2 Goodman	Electric	257,500
5	Madison Coal Corp., No. 5	Mt. Olive	2 Goodman	do	189,996
6	Vivian Collieries Co	Greenridge	1 Morgan-Gardner	do	137,058
7	Consolidated Coal Co., No. 8	Mt. Olive	2 General Electric	do	131,612
8	Glenridge Coal Co	Virden	2 General Electric	do	50,965
g	Shoal Creek Coal Co., No. 1	Panama	3 Goodman	do	429,270
10	Montgomery County Coal Co	Hillsboro	2 Goodman; 1 Jeffrey	do	173,299
11	Clover Leaf Coal Co	Coffeen	1 Goodman	do	125,164
	Seventh District-15 mines		41 motors		4,331,125
1	Southern Coal & Mining Co	New Baden	6 Goodman	Electric	294,137
2	Breese-Trenton Mining Co	Breese	4 Jeffrey	do	224,894
3					613,962
4	Mt. Olive & Staunton C. Co., No. 2	Williamson	2 Goodman	do	548,220
ŧ	Lumaghi Coal Co	Cantine	2 Goodman	do	390,461
-	Donk Bros. Coal & Coke Co	Maryville	3 General Electric	do	373,900
	Mt. Olive & Staun. C. Co., No. 1	Staunton	2 Goodman	do	282,715
	Donk Bros., No. 1	Donkville	3 Goodman	do	264,696
	Donk Bros., No. 3	Troy	2 Goodman	do	229,431
1	Madison Coal Corp., No. 2	Glen Carbon	2 Goodman	do	195,218
1	Madison Coal Corp., No. 4	do	2 Goodman	do	187,983
1	Centralia Coal Co., No. 2	Centralia	3 Goodman	do	237,856
1	Centralia Coal Co., No. 4	do	3 Jeffrey	do	203,911
1	4 Odin Coal Co	Odin	2 Goodman; 1 Jeffrey	do	151,868
1	5 Centralia Coal Co., No. 5	Centralia	2 Jeffrey	do	131,873

Table 35—Continued.

	District and Operator.	Location.	Motors.		Tonnage.
	Positive data - positive.		Name.	Kind.	
	Eighth District—12 mines		17 motors		1,566,586
1	Willis Coal & Mining Co., No. 6.	Percy	2 Goodman	Electric	227,047
2	Boyd Coal & Coke Co., No. 1	Sparta	1 Ellison	Gasoline	40,918
3	St. L. & O'Fallon Coal Co., No. 2	Caseyville	3 Goodman	Electric	531,298
4	St. L. & O'Fallon C. Co., No. 1	do	3 Goodman	do	272,443
5	Jos Taylor Coal Co., St. Ellen	O'Fallon	1 Jeffrey	do	168,344
6	Bessemer Washed Coal Co	Marissa	1 Goodman	do	152,435
7	Jos Taylor C. Co., Ridge Prairie.	O'Fallon	1 Jeffrey	do	77,991
8	International C. & M. Co	do	1 Jeffrey	do	39,651
9	Vulcan Coal Mining Co	Belleville	1 Ellison	Gasoline	23,422
10	L. Senior	do	1 Ellison	do:	21,552
11	Reeb Coal Co	do	1 Wagner	Electric	6,835
12	Glendale Coal & Mining Co	do	1 Goodman	do	4,650
	Ninth District—19 mines		37 motors		4,696,776
1	United Coal Mining Co	Christopher	2 Goodman; 1 Jeffrey	Electric	374,272
2	Benton Coal Co	Benton	2 Morgan-Gardner	do	332,127
3	Zeigler District Col. Co	Christopher	2 Morgan-Gardner	do	301,269
4	Franklin County Collieries Co	Sesser	2 Westinghouse	do	294,148
5	Brazil Block Coal Co	W. Frankfort	1 Goodman; 2 Morgan- Gardner	do	255,805
6	Hart-Williams Coal Co	Benton	2 Morgan-Gardner	do	232,777
7	W. P. Rend Col. Co	Rend	1 Morgan-Gardner	do	181,079
8	Majestic Coal & Coke Co	Clinch	2 Westinghouse	do	266,810
9	Paradise Coal Co	Duquoin	3 Goodman	do	220,449
10	Missouri & Illinois Coal Co	Willisville	1 Goodman	do	144,610
11	Willis Coal & Mining Co	do	3 Goodman	do	119,479
12	Brilliant Coal & Coke Co	Duquoin	2 Morgan-Gardner	do	62,692
13	O'Gara Coal Co., No. 9	Harrisburg	2 Morgan-Gardner	do	432,566
14	O'Gara Coal Co., No. 3	do	2 Morgan-Gardner	do	401,657
15	O'Gara Coal Co., No. 4	do	2 Morgan-Gardner	do	285,015
16	O'Gara Coal Co., No. 10	Eldorado	2 Morgan-Gardner	do	254,686
17	O'Gara Coal Co., No. 1	Harrisburg	1 Morgan-Gardner	do	247,575
18	O'Gara Coal Co., No. 14	Ledford	1 Morgan-Gardner	do	220,181
19	O'Gara Coal Co., No. 8	Eldorado	1 Morgan-Gardner	do	69,579

COAL IN ILLINOIS.

Table 35—Concluded.

-		1	1	_	
	District and Operator.	Location.	Motors.		Tonnage.
_			Name.	Kind.	
	Tenth District-14 mines		31 motors		3,280,605
1	Big Muddy Coal & I. Co., No 9.	Murphysboro	1 General Electric; 1 Westinghouse	Electric	163,677
2	Big Muddy Coal & Iron Co	do	2 Goodman	do	106,376
3	Big Muddy C. & I. Co., No. 8	Clifford	1 Jeffrey; 1 General Electric	do	492,754
4	Peabody Coal Co., No. 3	Marion	2 Goodman; 1 Morgan- Gardner	do	357,248
5	Sunnyside Coal Co	Herrin	3 Goodman	do	379,542
6	Chicago & Carterville C. Co. ''A''	do	3 Goodman	do	375,299
7	Big Muddy C. & I. Co., No. 7	do	3 Jeffrey	do	329,691
8	Chicago & Big Muddy Coal Co	Marion	1 Jeffrey; 1 Goodman	do	232,923
9	Western Coal Mining Co	Bush	3 General Electric	do	185,800
10	Chicago & Carterville C. Co. "B"	Herrin	2 Westinghouse	do	171,903
11	Madison Coal Corp., No. 8	Dewmain	2 Westinghouse	do	151,890
12	Peabody Coal Co., No. 2	Marion	2 Goodman	do	129,212
13	Carterville-Big Muddy Coal Co	Cambria	1 Goodman	do	117,722
14	Chicago-Herrin Coal Co	Herrin	1 Jeffrey	do	56,568

Table 36 gives the names and number of motors in use during the year by districts.

Table 36-Name and Number of Motors in Use, by Districts-1910.

Districts.	Ellison.	General Electric.	Goodman.	Jeffrey.	Morgan-Gardner	Porter, H. K.	Wagner.	Westinghouse.	Brock & Brink- man.	McClelland.	Morgan 3d rail.	Whitcomb,	Total.
First			2				ļ			ļ			2
Second			5	4	.:			2					11
Third			11	2	1			3					17
Fourth	ļ		8	2	2								12
Fifth		2	16	9	3			3					33
Sixth		4	10	9	1	4							28
Seventh		3	28	10	ļ								41
Eighth	3		10	3			. 1	ļ					17
Ninth			10	1	22			4					37
Tenth		5	14	6	1			5					31
The State, 1910	3	14	114	46	30	4	1	17					229
The State, 1909	1	14	102	40	26	4		20		2		1	210
The State, 1908	3	13	91	32	20	4		18	2		2		185
The State, 1907		3	69	27	9	1		17			3		129

COUNTIES OF LARGEST OUTPUT.

Table 37 presents a list of the counties whose annual product has

been 500,000 tons and over during the past ten years.

Williamson county has first place this year, as it has for the past three years, while Sangamon county has retained second place, which it has had for five consecutive years. Putnam, Menard, Marshall and Mercer, all of which have been in this class in some of the preceding years, failed to produce the required amount of tonnage this year. The output of the twenty counties this year is 92.2 per cent of the total output of the fifty-five coal producing counties of the State.

Table 37—Relative Rank of Counties Producing 500,000

		1910.		1909.		1908.	1907.			1906.	
County.	Rank.	Tonnage.		Tonnage.		Tonnage.		Tonnage.		Tonnage.	
Williamson	1	5,908,544	1	5,901,815	1	5,367,140	1	5,266,452	3	3,927,189	
Sangamon	2	5,103,322	2	5,334,148	2	5,082,626	2	4,876,621	2	4,155,431	
St. Clair	3	4,184,555	3	4,361,390	4	4,224,865	4	4,227,267	4	3,241,087	
Macoupin	4	4,040,425	4	3,409,362	3	4,413,639	3	4,435,070	1	4,168,019	
Madison	5	3,719,155	5	3,287,418	5	3,584,100	5	3,573,163	5	3,031,553	
Saline	6	3,062,098	6	2,798,527	7	2,482,677	10	1,711,825	18	601,979	
Franklin	7	2,071,143	7	2,442,978	10	1,678,195	18	863,165			
Vermilion	8	2,033,467	6	2,221,634	6	2,659,762	6	3,019,934	6	2,012,305	
Fulton	9	1,979,138	9	2,205,322	8	2,141,489	7	1,993,401	8	1,593,793	
Montgomery	10	1,814,203	13	1,480,635	14	1,382,368	15	1,078,366	17	649,839	
LaSalle	11	1,471,944	10	1,666,220	11	1,626,931	11	1,644,686	7	1,595,327	
Perry	12	1,390,436	11	1,536,903	12	1,610,411	9	1,743,922	10	1,443,926	
Bureau	13	1,352,994	11	1,654,902	9	1,688,528	8	1,891,900	9	1,547,456	
Christian	14	1,317,487	14	1,380,515	13	1,426,123	13	1,235,566	13	826,500	
Marion	10	1,065,268	16	1,096,847	18	954,925	14	1,084,783	14	826,280	
Clinton	16	1,000,935	17	1,051,108	16	1,152,670	16	1,061,410	15	770,689	
Grundy	17	927,152	15	1,177,073	15	1,174,482	12	1,327,197	11	1,170,625	
Peoria	18	924,873	18	821,329	17	1,054,673	17	1,027,023	12	844,484	
Randolph	19	846,969	19	757,622	19	777,329	19	742,894	19	581,841	
Jackson	20	665,385	20	650,033	20	637,090	20	705,363	16	759,962	
Putman			21	561,804							
Menard									20	536,273	
Marshall											
Mercer											
Totals, counties and tons	20	44,926,493	21	45,797,585	20	45,120,027	20	43,509,978	20	34,285,088	

Tons of Coal or Over for a Series of Ten Years-1901-1910.

_	1905 -		1904		1903 -		1902.	Γ	1901.	
Rank.	Tonnage.	Rank.	Tonnage.	Rank.	Tonnage.	Rank.	Tonnage.	Rank.	Tonnage.	County.
2	3,815,751	4	3,038,466	4	2,551,587	6	1,956,271	6	1,605,960	Williamson
1	4,395,050	1	4,516,358	1	4,386,526	1	3,672,984	1	2,919,223	Sangamon
6	2,530,840	6	2,221,474	6	2,223,055	4	2,075,253	3	2,115,319	St. Clair
3	3,398,032	2	3,418,479	2	3,134,679	2	2,578,553	2	2,518,847	Macoupin
4	2,987,906	5	3,030,982	5	2,711,767	5	2,013,692	7	1,595,081	Madison
										Saline
										Franklin
5	2,618,775	3	3,114,060	3	2,893,233	3	2,558,371	4	2,003,780	Vermilion
9	1,436,488	10	3,284,279	10	1,036,496	10	889,779	14	646,400	Fulton
										Montgomery
8	1,696,853	8	1,773,187	7	1,877,555	7	1,894,510	5	1,833,561	La Salle
17	1,268,778	11	1,242,174	11	1,031,751	14	789,625	13	664,278	Perry
7	1,751,875	7	1,832,577	8	1,778,302	8	1,732,813	8	1,549,056	Bureau
15	857,890	13	986,685	14	926, 563	15	725,088	16	578,482	Christian
12	1,086,350	12	1,083,734	12	1,002,047	11	881,821	11	829,326	Marion
14	904,826	15	925,515	16	870,518	16	724,462	15	644,664	Clinton
	1,326,109	9	1,405,158	9	1,457,935	9	1,383,336	9	1,293,992	Grundy
13	904,892	14	939,737	17	920,716	13	824,270	12	710,582	Peoria
19	506, 547	19	620,280							Randolph
16	802,101	16	862,641	13	972,284	12	853,056	10	911,245	Jackson
										Putnam
		14	543,763							Menard
18	510,968									Marshall
17	544,220	18	601,508	17	648,070		602,722	17	563,603	Mercer
19	33,346,792	19	33,438,969	17	30,423,084	17	26,156,511	17	22,982,499	Totals, counties and tons

Counties Producing Coal.

Table 38 is a list of all the coal producing counties of the State, showing the number of districts, mines, men and tons, also the division of the same as to shipping and local mines.

Table 38—Coal Producing Counties of the State, Showing Number of District, Mines, Men and Tons, All Mines, Shipping Mines, Local Mines—1910.

_											
ber.		ict.		All Min	es.	Shi	pping l	Mines.	Local Mines.		
Number.	Counties.	District.	Mines.	Men.	Tons.	Mines.	Men.	Tons.	Mines.	Men.	Tons.
1	Bond	7	1	149	103,537	1	149	103,537			
2	Brown	4	2	3	240				2	3	240
3	Bureau	2	15	4,000	1,352,994	7	3,925	1,326,430	8	75	26,564
4	Calhoun	6	1	14	4,620				1	14	4,620
5	Christian	5	9	1,882	1,317,487	8	1,870	1,292,876	1	12	24,611
6	Clinton	7	4	1,122	1,000,935	4	1,122	1,000,935			
7	Edgar	5	1	4	371				1	4	371
8	Franklin	9	10	2,630	2,071,143	10	2,630	2,071,143			
9	Fulton	2	111	3,769	1,979,138	22	3,504	1,867,017	89	265	112,121
10	Gallatin	9	9	154	76,692	2	126	69,015	7	28	7,677
11	Greene	6	2	15	4,660				2	15	4,660
12	Grundy	1	19	2,437	927,152	9	2,367	902,804	10	70	24,348
13	Hancock	4	3	16	10,009				3	16	10,009
14	Henry	2	25	326	135,633	3	151	78,570	22	-175	57,063
15	Jackson	10	21	1,199	665,385	10	1,165	646,447	11	34	18,938
16	Jefferson	9	2	37	8,517	1	35	8,485	1	2	32
17	Jersey	6	1	4	1,600				1	4	1,600
18	Johnson	10	3	9	1,084				3	9	1,084
19	Kankakee	1	1	97	8,435	1	97	8,435			
20	Knox	2	27	138	38,673				27	138	38,673
21	La Salle	1	33	3,386	1,471,944	15	3,143	1,302,348	18	243	169,596
22	Livingston	3	8	453	237,074	2	367	190,207	6	86	46,867
23	Logan	3	4	716	475,536	4	716	475,536			
24	Macon	5	5	552	265,530	5	552	265,530			
25	Macoupin	6	22	4,908	4,040,425	17	4,878	4,029,606	5	30	10,819
26	Madison	7	29	4,322	3,719,155	16	4,182	3,647,452	13	140	71,703
27	Marion	7	7	1,549	1,065,268	7	1,549	1,065,268			
28	Marshall	3	10	1,042	372,446	5	1,031	370,354	5	11	2,092
29	McDonough	4	43	160	27,483				43	160	27,483
30	McLean	3	2	270	101,860	2	270	101,860			

Table 38—Concluded.

ber.	Country	ict.	Δ	II Min	es.	Ship	oping !	lines.	Local Mines.			
Number.	County.	District.	Mines.	Men.	Tons.	Mines.	Men.	Tons.	Mines.	Men.	Tons.	
31	Menard	3	14	593	338,708	7	554	321 - 443	7	39	17,265	
32	Mercer	2	15	535	302,132	4	466	275,237	11	69	26,895	
33	Montgomery	6	11	2,205	1,811,203	10	2,191	1,804,683	1	14	6,520	
34	Morgan	4	2	6	1,708				2	6	1,708	
35	Moultrie	ā	1	34	5,520	1	34	5,520				
36	Peoria	3	65	1,538	924,873	18	1,287	799,994	47	251	124,879	
37	Perry	9	23	2,383	1,390,436	18	2,361	1,384,810	5	22	5,626	
38	Putnam	1	2	1,100	470,132	2	1,100	470,132				
39	Randolph	8	14	902	846,969	10	881	831,428	4	21	15,541	
40	Rock Island	2	11	132	61,525	1	18	7,753	10	114	53,772	
41	Saline	9	28	4,110	3,062,098	17	4,081	3,055,065	11	29	7,033	
42	Sangamon	4	36	6,995	5,153,322	31	6,875	5,076,961	5	120	76,361	
43	Schuyler	4	13	40	12,582				13	40	12,582	
44	Scott	4	9	35	5,318				9	35	5,318	
45	Shelby	5	6	358	154,393	2	303	143,867	4	55	10,526	
46	Stark	3	6	81	28,061	1	36	12,479	5	45	15,582	
47	St. Clair	8	72	5,435	4,184,555	55	5,294	4,060,898	17	141	123,657	
48	Tazewell	3	9	338	167,186	5	270	131,197	4	68	35,989	
49	Vermilion	5	38	3,640	2,033,467	14	3,378	1,832,600	24	262	200,867	
50	Warren	2	12	51	10,670				12	51	10,670	
51	Washington	7	3	105	24,827				3	105	24,827	
52	White	9	1	46	23,780	1	46	23,750				
53	Will	1	3	392	140,583	2	379	134,851	1	13	5,732	
54	Williamson	10	55	7,760	5,908,544	38	7,680	5,858,413	17	80	50,131	
55	Woodford	3	2	457	170,235	2	457	170,235				
	Total		881	74,634	48,717,853	390	71,520	47,225,201	491	3,114	1,492,652	

DISPOSITION OF THE OUTPUT.

Table 39 presents the total output of the shipping mines, and the disposition of the same, by districts. The output of the local mines and disposition of the same forms a single item at the bottom of this table.

Table 39—Disposition of the Output of Shipping Mines, by Districts, Also Local Mines.

		Total out-	${\bf Disposition\ of\ Product-Tons.}$					
Districts.	Number of put all grades— Tons.		Shipped from mine.	Supplies to locomotives at mine.	Sold to local trade.	Consumed and wasted at mines.		
First	29	2,818,570	2,457,179	111,170	133,202	117,019		
Second	37	3,555,007	3,297,969	63,077	80,932	113,029		
Third	46	2,573,305	2,112,621	118,415	212,221	130,048		
Fourth	31	5,076,961	4,706,433	83,531	140,898	146,099		
Fifth	30	3,540,393	2,983,414	100,839	358,315	97,825		
Sixth	27	5,834,289	5,370,335	32,214	193,155	238,585		
Seventh	28	5,817,192	5,294,642	181,034	118,448	223,068		
Eighth	65	4,892,326	4,544,769	76,226	81,401	189,930		
Ninth	49	6,612,298	6,160,585	63,136	226,841	161,736		
Tenth	48	6,504,860	6,079,068	55,750	60,728	309,314		
Shipping mines	390	47,225,201	43,007,015	885,392	1,606,141	1,726,653		
Local mines	491	1,492,652		825	1,261,730	230,097		
The State	881	48,717,853	43,007,015	886,217	2,867,871	1,956,750		

Table 40 gives the percentages of the items as shown in Table 39. This year the shipping mines loaded 91.07 per cent of their output on cars at the mines for transportation to the market.

Table 40—Percentages of the Output of Shipping Mines and Local Mines, Also Percentages of the Distribution, by Districts—1910.

	NT	Percentage of Tons—								
Districts.	Number of mines.	Total output.	Shipped.	To locomotive.	Sold to local trade.	Consumed or wasted. at mines.				
First	29	5.97	87.18	3.94	4.73	4.1				
Second	37	7.53	92.77	1.77	2.28	3.1				
Third	46	5.45	82,10	4.60	8,25	5.0				
Fourth	31	10.75	92.70	1.65	2.78	2.8				
Fifth	30	7.50	84.27	2.85	10.12	2.7				
Sixth	27	12.35	92.05	0.55	18.8	4.0				
Seventh	28	12.32	91.02	3.11	2.04	3.8				
Eighth	65	10.36	92.89	1.56	1.67	3.8				
Ninth	49	14.00	93,17	0.95	3,43	2.4				
Tenth	48	13.77	93,46	0.86	0.93	4.7				
Shipping mines	390	100,00	91.07	1.87	3.40	3.6				
Local mines	491	100.00		0.05	84.53	15.4				

Table 41 presents for eleven years the percentages of the distribution of the product of both classes of mines, shipping and local. There was 91.07 per cent of the output of the shipping mines loaded on cars at the mines for shipment. It will be noticed that in the column showing tons consumed or wasted at the mines that the shipping mines consumed or wasted only 3.66 per cent, while the local mines consumed or wasted 15.42 per cent or more than four times as large a per cent as the shipping mines.

Table 41—Total Output of the Shipping and Local Mines of the State, Also Percentages of the Distribution for Eleven Years.

		Percentages of—								
Year.	Total output.	Tons shipped.	Tons supplied to loco- motives.	Tons sold to local trade.	Tons consumed or wasted at the mines.					
1900	24,026,996	87.33	3.42	5.12	4.13					
1901	25,536,816	88.34	3.46	4.12	4.0					
1902	28,824,750	89.07	3.30	3.74	3.8					
1903	33,676,537	89.33	3.27	3.59	3,8					
1904	35,779,517	88,82	3.32	3.80	4.06					
1905	35,956,543	88.07	3.26	3.88	4.79					
1906	37,122,811	89.16	2.79	3.75	4.30					
1907	46,436,839	90.52	2.37	2.84	4.2					
1908	47,809,730	91.11	2.10	2.73	4.0					
1909	47,958,562	91.53	2.09	2,62	3.7					
1910	47, 225, 201	91.07	1.87	3.40	3,6					
,	L	OCAL MINE	s.							
1900	1,096,933		5.66	85.57	8.77					
1901	1,108,503		5.84	86.62	7.5					
1902	1,196,550		1.54	89.05	9.4					
1903	1,278,864		1.29	86,86	11.8					
1904	1,298,380		2.75	89.46	7.7					
1905	1,226,831		.49	98.20	1.3					
1906	1,194,770			95.91	4.0					
1907	1,361,782			86.85	13,1					
1908	1,462,722		,84	83.04	16.1					
1909	1,205,148		1.43	88.13	10.4					
1910	1,492,652		0.05	84 53	15.4					

DISTRIBUTION OF OUTPUT BY COUNTIES AND DISTRICTS.

Table 42 shows the disposition of the output of shipping mines by counties and districts and local mines by districts. In addition the percentages of the disposition of the tonnage of the shipping mines is shown in the table at the bottom of each district.

Table 42—Disposition of the Output of Shipping Mines, by Counties and Districts, and Local Mines, by Districts—1910.

FIRST DISTRICT.

			Disposition.						
County.	Number of mines.	Total tons.	Shipped from mines.	Supplied to locomo- tives at the mines.	Sold to local trade.	Consumed or wasted at the mines.			
Grundy	9	902,804	852,474		20,130	30,200			
Kankakee	1	8,435	7,935		150	350			
LaSalle	15	1,302,348	1,032,845	107,292	95,551	66,660			
Putnam	2	470,132	443,088	3,878	7,594	15,572			
Will	2	134,851	120,837		9,777	4,237			
The district	29	2,818,570	2,457,179	111,170	133,202	117,019			
Percentages			87.18	3.94	4.73	4.15			
Local mines	29	199,676		825	76,711	122,140			
		SECON	D DISTRICT						
Bureau	7	1,326,430	7,200,401	31,911	39,984	54,134			
Fulton	22	1,867,017	1,768,844	29,618	21,087	47,468			
Henry	3	78,570	64,150		12,798	1,622			
Mercer	4	275,237	257,271	1,548	6,913	9,505			
Rock Island	1	7,753	7,303		150	300			
The district	37	3,555,007	3,297.969	63,077	80,932	113,029			
Percentages			92.77	1.77	2.28	3,18			
Local mines	179	325,758			320,588	5,170			

Table 42—Continued.

THIRD DISTRICT.

			Disposition.						
County.	Number of mines.	Total tons.	Shipped from mines.	Supplied to locomo- tives at the mines.	Sold to local trade.	Consumed or wasted at the mines.			
Livingston	2	190, 207	151,436	13,611	8,535	16,625			
Logan	4	475,536	381,386	21,892	50,260	21,998			
McLean	2	101,860	9,340	25,012	54,247	13,26			
Marshall	5	370,354	295,892	40,277	18,208	15,97			
Menard	7	321,443	277,839	4,243	26,017	13,34			
Peoria	18	799,994	751,856	7,000	6,191	34,94			
Stark	1	12,479	10,075		2,204	20			
Tazewell	5	131,197	91,699	1,000	34,518	3,98			
Woodford	2	170,235	143,098	5,380	12,041	9,716			
The district	46	2,573,305	2,112,621	118,415	212,221	130,04			
Percentages			82.10	4.60	8.25	5.0			
Local mines	74	242,674			220,762	21,91			
		FOURTE	I DISTRICT.						
Sangamon	31	5,076,961	4,706,433	83,531	140,898	146,09			
The district	31	5,076,961	4,706,433	83,531	140,898	146,09			
Percentages			92.70	1.65	2.78	2.8			
Local mines	77	133,701			130,517	3,18			
		FIFTH	DISTRICT.						
Christian	8	1,292,876	964,808	75,539	195,421	57,10			
Macon	5	265,530	114,211		141,391	9,92			
Moultrie	1	5,520	2,045		1,875	1,60			
Shelby	2	143,867	126,440		13,234	4,19			
Vermilion	14	1,832,600	1,775,910	25,300	6,394	24,99			
The district	30	3,540,393	2,983,414	100,839	. 358,315	97,82			
Percentages			84.27	2.85	10.12	2.7			
Local mines		236,375			165,193	71,18			
		SIXTH	DISTRICT.	-					
Macoupin	17	4,029,606	3,753,550	32,214	45,962	197,880			
Montgomery	10	1,804,683	1,616,785		147,193	40,70			
The district	27	5,834,289	5,370,335	32,214	193,155	238,58			
Percentages			92.05	0.55	3.31	4.0			
Local mines	10	28,219			27,406	81			

Table 42—Concluded.

SEVENTH DISTRICT.

				Disposit	ion.	
County.	Number of mines.	Total tons.	Shipped from mines.	Supplied to locomo- tives at the mines.	Sold to local trade	Consumed or wasted at the mines.
Bond	1	103,537	96,830		1,507	5,200
Clinton	4	1,000,935	869,038	54,735	12,695	64,467
Madison	16	3,647,452	3,448,814	15,014	71,056	112,568
Marion	7	1,065,268	879,960	111,285	33,190	40,833
The district	28	5,817,192	5,294,642	181,034	118,448	223,068
Percentage			91.02	3.11	2.04	3,83
Local mines	16	96,530			94,765	1,768
	-	EIGHTE	I DISTRICT.			
Randolph	10	831,428	795,900		10,668	24,860
St. Clair	55	4,060,898	3,748,869	76,226	70,733	165,070
The district	65	4,892,326	4,544,769	76,226	81,401	189,93
Percentages			92.89	1.56	1.67	3.8
Local mines	21	139,198			136,065	3,13
		NINTH	DISTRICT.			
Franklin	10	2,071,143	1,988,687		24,899	57,55
Gallatin	2	69,015	58,139	4,582	1,207	5,08
J efferson	1	8,485	800		6,915	77
Perry	18	1,384,810	1,135,631	52,191	155,037	41,95
Saline	17	3,055,065	2,965,018	1,116	33,643	55,28
White	1	23,780	12,310	5,247	5,140	1,08
The district	49	6,612,298	6,160,585	63,136	226,841	161,73
Percentages			93.17	0.95	3.43	2.4
Local mines	24	20,368			19,877	49:
A production of the second		TENTH	DISTRICT.			
Jackson	10	646,447	531,710	41,300	26,551	46,88
Williamson	38	5,858,413	5,547,358	14,450	34,177	262,42
The district	48	6,504,860	6,079,068	55,750	60,728	309,31
Percentages			93.46	0.86	0.93	4.7

70,153

Local mines

Table 43 presents the distribution to the railroads of the coal shipped from the several counties of the State, and the coal supplied to locomotives at the mines, also the percentages of each item by counties. This year shows forty railroads transporting the coal from the 390 shipping mines of the State; these mines are located in forty-one counties. The Illinois Central Railroad continues at the head of the list of roads hauling the greatest tonnage of any road in the State. This year this road received coal from 110 mines located in twenty-one counties.

The total tons hauled by this road was 7,149,016 or 16.62 per cent of the total tons moved; while during the year the locomotives of this road were supplied with 339,749 tons, or 38.37 per cent of the total

supplied to locomotives of all roads.

The Chicago, Burlington & Quincy Railroad has second place this year, as it did last, hauling 5,068,298 tons of coal from fifty-three mines located in thirteen counties. The largest tonnage taken by any one road from one county was the Cleveland, Cincinnati, Chicago & St. Louis Railroad, hauling 2,846,104 tons from Saline county. It is also shown at the bottom of this table that 25,295 tons were hauled by boat from three mines in two counties.

Table 43—Railroads Which Have Transported the Coal Produced by the Shipping Mines of the State, Also the Counties Contributing the Tonnage to Each Road—1910.

		-unoo je	Jo	Tons Rec Each Ro	ceived by oad for—	Percei	ntage—
Number.	Railraods and Counties.	Number of counties.	Number mines.	Shipment.	Locomo- tives.	Shipped.	Supplied to locomo- tives.
	The State	41	390	43,007,615	885,392		
1	Illinois Central	21	110	7,149,016	339,749	100.00	100.00
	Williamson Perry Marion Sangamon St. Clair Jacksoln Madisin Madisin Christian Randolph Maooupin Logan LaSalle Sallie Montgomery Moodford Shelby Woodford Shelby Kankakee Mc Lean		7 8 20 7 4 2 5 5 1 3 4 4 1 1 1	1,668,637 818,700 783,208 721,231 703,215 369,744 342,260 334,196 300,055 269,561 166,670 160,329 158,150 118,914 75,359 47,058 35,532 35,532 35,532 33,484 3,967 3,540	6,641 45,991 111,285 19,512 24,180 41,300 1,123 21,757 15,643 47,305	23,34 11,45 10.96 10.09 9.84 5.17 4.67 4.20 3.77 2.37 2.24 2.21 1.66 1.05 .68 .50 .49 .47 .06	1 95 13 54 32 76 5 74 7 12 15 16 16 16 16 16 16 16 16 16 16 16 16 16

Table 43—Continued.

		conn-			reived by	Percer	ntage-
Number.	Railroads and Counties.	Number of c ties.	Number of mines.	Shipment.	Locomo- tives.	Shipped.	Supplied to locomotives.
2	Chicago, Burlington & Quincy	13	53	5,068,298	27,801	100.00	100.00
	Fulton Franklin Williamson Macoupin LaSalle Sangamon Peoria Marion Mercer Henry Bureau Montgomery Stark		18 5 7 4 6 1 5 1 1 2 1 1	1,509,820 1,041,138 923.746 627,762 341,280 229,994 119,944 93,618 77.135 58,916 22,758 12,112 10,075	17,556 1,624 4,000 2,956 1,665	29.79 20.54 18.22 12.39 6.73 4.54 2.37 1.85 1.52 1.16 .45 .24	63.15 5.84 14.39 10.63
3	Cleveland, Cincinnati, Chicago & St. L. Saline Vermilion Montgomery. Madison Shelby Macoupin Tazewell. Christian. Mc Lean		34 16 4 5 1 1 2 3 1	4,286,433 2,846,104 727,143 350,737 190,877 83,661 37,182 34,647 15,882 200	32,819 1,116 25,300 139 6,264	100.00 66.40 16.96 8.18 4 45 1.95 .87 .81 .37	3.40 77.09 .42 19.09
4	Chicago & Fastern Illinois Williamson Vermilion Montgomery Franklin Madison Christian	6	9 5 4 3 1 2	3,779,674 1,332,688 934,339 556,725 500,663 413,962 41,357	32,621	35.26 24.72 14.73 13.25 10.95 1.09	100.00
5	Wabash Sangamon Macoupin Christian Madison Vermilion Macon Livingston LaSalle Montgomery		26 8 5 3 1 3 1 1 1	2,847,402 1,067,926 836,194 592,776 209,927 42,505 40,328 40,817 9,825 6,504	62,249 36,819 10,533 14,897	100.00 37.51 29.37 20.82 7.37 1.49 1.44 1.43 .34 .23	100.00 59.15 16.92 23.93
6	Chicago & Alton Sangamon Macoupin Logan Menard Will LaSalle Marshall Grundy Mc Lean		35 15 6 3 3 1 2 1 3 1	2,076,780 1,407,694 226,955 221,057 111,261 41,344 37,779 20,540 9,550 600	32,295 8,504 1,899 21,892	100,00 67,78 10,93 10,64 5,36 1,99 1,82 99 ,46 ,03	100.00 26.33 5.88 67.79
7	Macoupin County R. R	1	3	1,858,787		100.00	
-	Macoupin		_3_	1,858,787	**********	100.00	

Table 43—Continued.

St. Louis, Iron Mountain & Southern 3 19 1,394,290 4,953 100.00 100.00		Luote	40		ontinueu	•		
St. Louis, Iron Mountain & Southern 3 19 1,394,260 4,953 100.00 100.01			-unoo je	of	Tons Rec Each Ro	ceived by	Percer	ıtage—
Williamson	Number.	Railroads and Counties.	Number of ties.	Number mines.	Shipment.		Shipped.	Supplied to locomo- tives.
9 Vandalia Line	8	St. Louis, Iron Mountain & Southern	3	19	1,394,269	4,953	100.00	100.00
Madison St. Clair 1 34 359, 225 27, 64 67 80 16, 67 80 16, 67 80 16, 67 80 16, 67 80 16, 67 80 16, 67 80 16, 67 80 16, 67 80 16, 67 80 16, 67 80 16, 67 80 80 16, 67 80 80 16, 67 80 80 16, 67 80 80 16, 67 80 80 16, 67 80 80 16, 67 80 80 16, 67 80 80 16, 67 80 80 80 16, 67 80 80 80 16, 67 80 80 80 80 16, 67 80 80 80 80 80 80 80 8		Franklin		14 2 3	1,221,839 104,686 67,744	4,953	87.63 7.51 4.86	100.00
St. Clair.	9	Vandalia Line	6	10	1,262,774		100.00	
Clinton		St. Clair. Montgomery. Bond Macon		1 1 1 2	349,025 210,549 96,830 24,100		27.64 16.67 7.67 1.91	
Christian	10	Baltimore & Ohio Southwestern	7	19	1,254,308	74,400	100.00	100.00
Putnam 2 443,088 3,878 45,99 15 Bureau 2 2,283,350 19,978 29,93 81,6 LaSalle 2 2,283,350 19,978 29,93 81,6 12 Elgin, Joliet & Eastern 2 9 914,000 100.00 Grundy 8 8,34,507 91.30 87,0 Will 1 79,433 8,70		St. Clair Sangamon Christian White Shelby		6 4 3 1		14,418	35.18 14.67 1.18 .98	73.57 19.38 7.05
Bureau 2 2 283,350 19,978 29 93 81.4 LaSalle 2 2 31,929 19,000 100.00 Elgin, Joliet & Eastern 2 9 914,000 100.00 Grundy 8 8 834,507 91.30 Vill 1 79,433 8,70 13 Litehfield & Madison 5 872,723 10,258 100.00 100.0 Madison 5 872,723 10,258 100.00 100.0 Madison 3 836,944 2,297 100.00 100.0 Madison 3 836,944 2,297 100.00 100.0 St. Louis & O'Fallon 1 2 792,260 4,516 100.00 100.0 St. Clair 2 792,260 4,516 100.00 100.0 Bureau 5 775,383 10,228 100.00 100.0 St. Clair 2 792,260 4,516 100.00 100.0 St. Clair 2 792,260 4,516 100.00 100.0 St. Clair 2 792,260 4,516 100.00 100.0 Mobile & Chicago & North Western 5 775,383 10,228 100.00 100.0 St. Clair 1 426,810 60,43 39.57 Southern 2 12 706,276 100.00 St. Clair 11 426,810 60,43 39.57 Mobile & Chico 3 7 680,828 100.00 Randolph 3 32,828 100.00 47.54 Perry 2 262,911 35.61	11	Chicago, Milwaukee & St. Paul	3	6	963,367	24,658	100.00	100,00
Grundy		Bureau		2 2 2	443,088 288,350 231,929	19,978	29.93	15.73 81.02 3.25
Will	12	Elgin, Joliet & Eastern	2	9	914,000		100.00	
Madison		Grundy Will			834,507 79,493			
14 St. Louis, Troy & Eastern 1 3 836,944 2,297 100.00 100.0 Madison 3 836,944 2,297 100.00 100.0 15 St. Louis & O'Fallon 1 2 792,260 4,516 100.00 100.0 St. Clair 2 792,260 4,516 100.00 100.0 Bureau 5 775,383 10,228 100.00 100.0 17 Southern 2 12 706,276 100.00 St. Clair 11 426,810 60.43 60.43 Clinton 1 279,466 39.57 18 Mobile & Ohio 3 7 680,82,805 100.00 Randolph 3 33,2,605 47.54 226,911 35.61	13	Litchfield & Madison	1	. 5	872,723	10,258	100.00	100.00
Madison		Madison		_5_	872,723	10,258	160.00	100.00
15 St. Louis & O'Fallon 1 2 792,260 4,516 100.00 100.0 St. Clair 2 792,260 4,516 100.00 100.0 St. Clair 1 5 775,383 10,228 100.00 100.0 Bureau 5 775,383 10,228 100.00 100.0 St. Clair 2 12 706,276 100.00 St. Clair 11 426,810 60.43 Clinton 1 1 279,466 39.57 18 Mobile & Ohio 3 7 680,828 100.00 Randolph 3 3 323,695 477,54 Perry 2 2 626,911 58.61	14	St. Louis, Troy & Eastern	1	3	836,944	2,297	100.00	100.00
St. Clair 2 792,260 4,516 100,00 100. 16 Chicago & North Western 1 5 775,383 10,228 100,00 100. Bureau 5 775,383 10,228 100,00 100. 17 Southern 2 12 706,276 100,00 St. Clair 11 426,810 60,43 39.57 18 Mobile & Ohio 3 7 680,828 100,00 Randolph 3 3,32,695 100,00 Randolph 3 3 323,695 47.54 Perry 2 2 62,911 38.61		Madison		3	836,944	2,297	100.00	100.00
16 Chicago & North Western 1 5 775,383 10,228 100,00 100.0 Bureau 5 775,383 10,228 100,00 100.0 17 Southern 2 12 706,276 100.00 St. Clair 11 426,810 60.43 Clinton 1279,466 39.57 18 Mobile & Ohio 3 7 680,828 100.00 Randolph 3 323,695 47.54 Perry 2 2 262,911 38.61	15	St. Louis & O'Fallon	1	2	792,260	4,516	100.00	100,00
Bureau		St. Clair		2	792,260	4,516	100.00	100.00
17 Southern 2 12 706,276 100,00 St. Clair. 11 426,810 60,43 39,57 18 Mobile & Ohio 3 7 680,828 100,00 Randolph 3 323,695 47,54 47,54 Perry 2 2 262,911 38,661	16	Chicago & North Western	1	5	775,383	10,228	100.00	100.00
St. Clair. 11 426,810 60,43 Clinton. 1 279,466 39.57 18 Mobile & Ohio 3 7 680,828 100.00 Randolph. 3 323,605 47.54 Perry. 2 262,911 38.61		Bureau		_5_	775,383	10,228	100.00	100,00
18 Mobile & Ohio 3 7 680,828 100.00	17		2					
Randolph 3 323,695 47.54 Perry 2 262,911 38.61		St. Clair Clinton			426,810 279,466			
Perry 2 262,911 38.61 38.61	18	Mobile & Ohio	3					
2 94,222				3 2 2	323, 695 262, 911 94, 222		47.54 38.61 13.85	

	Railroads and Counties.		of	Tons Re Each R	ceived by oad for —	Perce	ntage-
Number.			Number mines.	Shipment.	Locomo- tives.	Shipped.	Supplied to locomotives.
19	Chicago, Peoria & St. Louis	2	12	659,135	5,838	100.00	100,00
	Sangamon. Menard.		8	492, 557 166, 578	1,595 4,243	74.73 25.27	27.32 72.68
20	Iowa Central	2	6	502, 663		100,00	
	Peoria. Fulton		3 3	310, 173 192, 490		61.71 38,29	
21	Louisville & Nashville	3	14	491,123	51,011	100,00	100.00
	St. Clair Gallatin Jefferson		11 2 1	432,184 58,139 800	46, 429 4, 582	88.00 11.84 .16	91.02 8.98
22	Chicago, Rock Island & Pacific	6	12	474,635	57,777	100.00	100.00
	LaSalle. Mercer. Bureau. Marshall. Rock Island Henry.		5 1 3 1 1	176,400 152,780 113,910 22,573 7,303 1,669	56,229 1,548	37.16 32.19 23.99 4.76 1.54 .36	97.32 2.68
23	Toledo, St. Louis & Western	2	3 2	433,791 433,100		100,00	
	Madison.	===	_ <u>1</u>	691		.16	
24	East St. Louis & Suburban Electric	1	3	386,051	1,101	100,00	100.00
	St. Clair		3	386,051	1,101	100 00	100.00
25	Coal Belt	1	5	368,493	332	100.00	100,00
	Williamson		_5	368, 493	332	100.00	100.00
26	Chicago & Illinois Midland	1	1	342,395	2,683	100.00	100.00
	Sangamon	===	1	342,395	2,683	100.00	100.00
27	Atchison, Topeka & Santa Fé	5	10	312,728	43,982	100.00	100,00
	Marshall Woodford Tazewell LaSalle Grundy		1 2 2 3 2	121,107 107,892 43,502 31,800 8,417	37,602 5,380 1,000	38.73 34.50 13.91 10.17 2.69	85,49 12,24 2,27
28	St. Louis & Belleville Electric	1	2	218,044		100.00	
	St. Clair		2	218,044		100.00	
29	Illinois Southern	1	3	202,644		100.00	
	Randolph		3	202,644		100.00	

Table 43—Concluded.

		of coun-	of	Tons Rec Each Ro		Percer	ntage—
Number.	Railroads and Counties.	Number of ties.	Number mines.	Shipment.	Locomo- tives.	Shipped.	Supplied to locomo- tives.
30	Cincinnati, Hamilton & Dayton	2	5	201,288		100.00	
	Sangamon Macon		3 2 ==	187,637 13,651		93,22 6.78	
31	Peoria & Pekin Vnion	2	5	198,947	7,000	100.00	100.00
	Peoria. Tazewell.		4 1	190,647 8,300	7,000	95.83 4.17	100.00
32	Toledo, Peoria & Western	3	8	178,021	25,673	100.00	100,00
	Peoria. Fulton Livingston		5 2 1	109,362 66,534 2,125	12,062 13,611	61 .43 37 .38 1 .19	46.98 53.02
33	Chicago, Indiana & Southern	4	4	158,134	40	100.00	100.00
	LivingstonLa Salle		1	108,494 45,672		68.61 28.88	
	Kankakee Bureau		1	45,672 3,968	40	2.51	100.00
34	Illinois Traction System	2	4	144,943		100.00	
	Sangamon Vermilion		2	73,020 71.923		50.38 49.62	
35	Toledo, Marquette & Northern	1	1	56,313	2,675	100.00	100.00
	Marshall	===	_1	56,313	2,675	100.00	100.00
36	Wabash, Chester & Western	1	3	54,020	6,200	100.00	100.00
	Perry		3	54,020	6,200	100.00	100.00
37	Eldorado, Marion & Southwestern	1	2	31,955	900	100.00	100,00
	Williamson		2	31,955	900	100.00	100.00
38	Rock Island & Southern	1	2	27,356		100.00	
	Mercei		2	27,356		100.00	
39	Lake Erie & Western	2	2	10,250	20,000	100,00	100.00
	Tazewell McLean		1	5,250 5,000	20,000	51.22 48.78	100.00
40	Illinois Terminal	. 1	1	9,269	1,336	100.00	100,00
	Madison		1	9.269	1,336	100.00	100.00
	By boat	. 2	3	25, 295		100.00	
	Peoria—Illinois river Henry—Hennepin canal			21,730 3,565		85.91 14.03	

Table 44 is a recapitulation of Table 43 and shows the tons of coal received by each road for two purposes: for shipment to markets and supplying locomotives at the mines. Ten of these roads transported over one million tons each, aggregating 30,977,741 tons or 72 per cent of the total shipments for the State. The Illinois Central Railroad received for its locomotives 339,749 tons, that being 265,349 tons more than received by any other road for their locomotives.

Table 44—Illinois Coal Delivered to Illinois Railroads at the Mines for Shipment and for Use on Locomotives—1910.

er.	Railroads.	Numb	er of—	Tons Re by F Road	Each	Total tons.	
Number.		Coun- ties.	Mines.	Ship- ment.	Loco- motives.	tons.	
•	Total 41 railroads and boats	41	390	43,007,015	885,392	43,892,407	
1	Illinois Central	21	110	7,149,016	339,749	7,488,765	
2	Chicago, Burlington & Quincy	13	53	5,068,298	27,801	5,096,099	
3	Cleveland, Cincinnati, Chicago & St. Louis	9	34	4,286,433	32,819	4,319,252	
4	Chicago & Eastern Illinois	6	24	3,779,674	32,621	3,812,295	
5	Wabash	9	26	2,847,402	62,249	2,909,651	
6	Chicago & Alton	9	35	2,076,780	32,295	2,109,075	
7	Macoupin County R. R	1	3	1,858,787		1,858,787	
8	St. Louis, Iron Mountain & Southern	3	19	1,394,269	4,953	1,399,222	
9	Vandalia Line	6	10	1,262,774		1,262,774	
10	Baltimore & Ohio Southwestern	7	19	1,254,308	74,400	1;328,708	
11	Chicago, Milwaukee & St. Paul	3	6	963,367	24,658	988,025	
12	Elgin, Joliet & Eastern	2	9	914,000		914,000	
13	Litchfield & Madison	1	ē	872,723	10,258	882,981	
14	St. Louis, Troy & Eastern	1	. 3	836,944	2.297	839,241	
15	St. Louis & O'Fallon	1	. 2	792,260	4,516	796,776	
16	Chicago & Northwestern	1		775,383	10,228	785.611	
17	Southern	2	2 12	706, 276		706,276	
18	Mobile & Ohio		3	680,828		680,828	
19	Chicago, Peoria & St. Louis.	1	2 15	659,135	5,838	664,973	
20	Iowa Central	:	2 (502,663		502,663	
21	Louisville & Nashville		3 1-	491,123	51,011	542,134	
25	Chicago, Rock Island & Pacific		6 1:	474,635	57,777	532,412	
23	Toledo, St. Louis & Western		2 :	433,791		433,791	
2-	East St. Louis & Suburban Electric		1	386,051	1,101	387,152	
2	Coal Belt		1	5 368,493	332	368,825	

Table 44—Concluded.

ŗ.	Railroads,	Num	ber of	Tons R by I Road	Total tons.	
Number.		Coun- ties.	Mines.	Ship- ment.	Loco- motives.	tons,
26	Chicago & Illinois Midland	1	1	342,395	2,683	345,078
27	Atchison, Topeka & Santa Fé	5	10	312,728	43,982	356,710
28	St. Louis & Belleville Electric	1	2	218,044		218,044
29	Illinois Southern	1	3	202,644		202,644
30	Cincinnati, Hamilton & Dayton	2	5	201,288		201,288
31	Peoria & Pekin Union	2	5	198,947	7,000	205,947
32	Toledo, Peoria & Western	3	8	178,021	25,673	203,694
33	Chicago, Indiana & Southern	4	4	158,134	40	158,174
34	Illinois Traction System, Electric	2	4	144,943		144,943
35	Toledo, Marquette & Northern	1	1	56,313	2,675	58,988
36	Wabash, Chester & Western	1	3	54,020	6,200	60,220
37	Eldorado, Marion & Southwestern	1	2	31,955	900	32,855
38	Rock Island Southern	1	2	27,356		27,356
39	Lake Erie & Western	2	2	10,250	20,000	30,250
40	Illinois Terminal	1	1	9,269	1,336	10,605
41	By boat—Illinois river and Hennepin canal	2	3	25,295		25,295

COUNTIES FURNISHING COAL TO RAILROADS FOR SHIPMENT.

Table 45 presents a list of counties from which coal was shipped on railroads traversing their territory, as shown in Table 43, giving the amount and the percentage shipped by the county over each road. This table is arranged by counties shipping the largest tonnage.

Table 45—Counties Which Have Produced the Commercial Coal of the State and the Tonnage Delivered to the Several Railroads in Each for Transportation.

Number.	Counties and Railroads.	Number of railroads.	Number of mines.	Tons delivered to each railroad.	Total tons shipped and per cent to each road.
1	Williamson	6			5,547,358
	Illinois Central Chicago & Eastern Illinois St. Louis, Iron Mountain & Southern		18 9 14	1,668,637 1,332,688 1,221,839	30.08 24.02 22.03
	Chicago, Burlington & Quincy Coal Belt. Eldorado, Marion & Southwestern.		7 5 2	923,746 368,493 31,955	16.65 6.64 0.58

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Nnmber.	Counties and Railroads.	Number of railroads.	Number of mines.	Tons delivered to each railroad.	Total tons shipped and per cent to each road.
2	Sangamon	9			4,706,433
	Chicago & Alton Wabash Illinois Central Chicago, Peoria & St. Lonis Chicago & Illinois Midland Chicago & Illinois Midland Chicago, Burlington & Quincy Cincinnati, Hamilton & Dayton Baltimore & Ohio—South Western Illinois Traction System.		15 8 8 1 1 1 3 4 2	1,407,694 1,067,926 721,231 492,557 342,395 229,994 187,637 183,979 73,020	29.91 22.69 15.32 10.47 7.27 4.89 3.99 3.91 1.55
3	Macoupin	- 6			3,753,550
	Macoupin County R. R. Wabash. Chicago, Burlington & Quincy Chicago & Alton Illinois Central Cleveland, Cincinnati, Chicago & St. Louis.		3 5 4 6 1	1,858,787 836,194 627,762 226,955 166,670 37,182	49.52 22.28 16.72 6.05 4.44 0.99
4	St. Clair	8			3,748,869
	St. Louis & O'Fallon Illinois Central Baltimore & Ohio Southwestern Louisville & Nashville Southern East St. Louis & Suburban (Electric) Vandalia Line St. Louis & Belleville (Electric)		2 20 6 11 11 3 1	792,260 703,215 441,280 432,184 426,810 386,051 349,025 218,044	21.13 18.76 11.77 11.53 11.38 10.30 9.31 5.82
5	Madison	9			3,448,814
	Litchfield & Madison. St. Louis, Troy & Eastern. Vandalia Line. Chicago & Eastern Illinois. Illinois Central. Chicago & Eastern Illinois. Cleveland, Cincinnati, Chicago & St. Louis. Illinois Terminal. Toledo, St. Louis & Western		5 3 4 1 2 3 1 1	872,723 836,944 580,225 413,962 334,196 209,927 190,877 9,269 691	25.31 24.27 16.82 12.00 9.69 6.09 5.53 0.27 0.02
6	Saline	2			2,965,018
	Cleveland, Cincinnati, Chicago & St. Louis		16	2,846,104 118,914	95.99 4.01
7	Franklin	4			1,988,687
	Chicago, Burlington & Quincy Chicago & Eastern Illinois Illinois Central St. Louis, Iron Mountain & Southern		1 3 4	1,041,138 500,603 342,260 104,686	52.35 25.18 17.21 5.26
8	Vermilion	4			1,775,910
	Chicago & Eastern Illinois Cleveland, Cincinnati, Chicago & St. Louis Illinois Traction System Wabash			934,339 727,143 71,923 42,505	52,61 40,95 4,05 2,39
		l .	1		a contract of

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Number.	Counties and Railroads.	Number of railroads.	Number of mines.	Tons delivered to each railroad.	Total tons shipped and per cent to each road.
9	Fulton	3			1,768,844
	Chicago, Burlington & Quincy Iowa Central Toledo, Peoria & Western.		18 3 2	1,509,820 192,490 66,534	85.36 10.88 3.76
10	Montgomery	7			1,616,785
	Chicago & Eastern Illinois Toledo, St. Louis & Western Cleveland, Cincinnati, Chicago & St. Louis. Vandalia Line Illinois Central Chicago, Burlington & Quincy Wabash		4 2 5 1 2 1 1	556,725 433,100 350,737 210,549 47,058 12,112 6,504	34.44 26.79 21.69 13.02 2.91 0.75 0.40
11	Bureau	4			1,200,401
	Chicago & North Western Chicago, Milwaukee & St. Paul Chicago, Rock Island & Pacific Chicago, Burlington & Quincy		5 2 1 1	775,383 288,350 113,910 22,758	64.59 24.02 9.49 1.90
12	Perry	3			1,135,631
	Illinois Central Mobile & Ohio Wabash, Chester & Western		13 2 3	818,700 262,911 54,020	72.09 23.15 4.76
13	La Salle	l .			1,032,845
	Chicago, Burlington & Quincy Chicago, Milwaukee & St. Paul Chicago, Rock Island & Pacific Illinois Central Chicago, Indiana & Southern Chicago & Alton Atchison, Topeka & Santa Fé Wabash		5 2 5 4 1 2 3 1	341,280 231,929 176,400 158,150 45,672 37,779 31,810 9,825	33.04 22.46 17.08 15.31 4.42 3.66 3.08 0.95
14	Christian	5			964,808
	Wabash Illinois Central Cheego & Eastern Illinois Cheveland, Cincinnati, Chicago & St. Louis Baltimore & Ohio Southwestern		3 5 2 3 3	592,776 300,055 41,357 15,882 14,738	61.44 31.10 4.29 1.65 1.52
15	Marion	3			879,960
	Illinois Central Chicago, Burlington & Quincy Baltimore & Ohio Southwestern		7 1 1	783,208 93,618 3,134	89.00 10.64 0.36
16	Clinton	2			869,038
	Baltimore & Ohio SouthwesternSouthern		3	589,572 279,466	67.84 32.16
17	Grundy	3			852,474
	Elgin, Joliet & Eastern Chicago & Alton Atchison, Topeka & Santa Fé		8 3 2	834,507 9,550 8,417	97.89 1.12 0.99

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Number.	Counties and Railroads.	Number of railroads.	Number of mines.	Tons delivered to each railroad.	Total tons shipped and per cent to each road.
18	Randolph	3			795,900
	Mobile & Ohio Illinois Central Illinois Southern		3 5 3	323,695 269,561 202,644	40.67 33.87 25.46
19	Peoria	4			730,126
	Iowa Central Peoria & Pekin Union Chicago, Burlington & Quincy Toledo, Peoria & Western		3 4 5 5	310,173 190,647 119,944 109,362	42.48 26.11 16.43 14.98
20	Jackson,	3			531,710
	Illinois Central Mobile & Ohio St. Louis, Iron Mountain & Southern.		7 2 3	369,744 94,222 67,744	69.54 17.72 12.74
21	Putnam	1			443,008
	Chicago, Milwaukee & St. Paul		1	443,088	100.00
22	Logan	2			381,386
	Chicago & Alton Illinois Central		3 3	221,057 160,329	57,96 42.04
23	Marshall	5			295,892
	Atchison, Topeka & Santa Fé. Illinois Central. Toluca, Marquette & Northern Chicago, Rock Island & Pacific Chicago & Alton		1 1 1 3 1	121,107 75,359 56,313 22,573 20.540	40.93 25.47 19.03 7.63 6.94
24	Menard	2			277,839
	Chicago, Peoria & St. Louis Chicago & Alton		4 3	166,578 111,261	59.95 40.05
25	Mercer	3			257,271
	Chicago, Rock Island & Pacific Chicago, Burlington & Quincy Rock Island Southern		1 1 2	152,780 77,135 27,356	59.39 29.98 10.63
26	Livingston	3			151,436
	Chicago, Indiana & Southern. Wabash. Toledo, Peoria & Western.		1 1 1	108,494 40,817 2,125	•71.64 26.95 1.41
27	Woodford	2			143,098
	Atchison, Topeka & Santa FéIllinois Central		2	107,892 35,206	75.40 24.60

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Number.	Counties and Railroads.	Number of railroads.	Number of mines.	Tons delivered to each railroad.	Total tons shipped and per cent to each road.
28	Shelby	3			126,440
	Cleveland, Cincinnati, Chicago & St. Louis Illinois Central. Baltimore & Ohlo—South Western.		1 1 1	83,661 33,484 9,295	66.17 26.48 7.35
29	Will	2			120,837
	Elgin, Joliet & Eastern Chicago & Alton		1	79,493 41,344	65.79 34.21
30	Macon	4			114,211
	Wabash Illinois Central Vandalia Line Cincinnati, Hamilton & Dayton		3 1 2 2	40,928 35,532 24,100 13,651	35,84 31,11 21,10 11,95
31	Bond	1			96,830
	Vandalia Line		1_	96,830	100.00
32	Tazewell	4			91,699
	Atchison, Topeka & Santa Fé Cleveland, Cincinnati, Chicago & St. Louis Peoria & Pekin Union Lake Erie & Western		2 2 1 1	43,502 34,647 8,300 5,250	47.44 37.78 9.05 5.73
33	Henry	2			60,585
	Chicago, Burlington & Quincy Chicago, Rock Island & Pacific		2	58,916 1,669	97.25 2.75
34	Gallatin	1			58,139
	Louisville & Nashville		2	58,139	100.00
35	White	1			12,310
	Baltimore & Ohio Southwestern		1	12,310	100.00
36	Stark	1			10,075
	Chicago, Burlington & Quinev		1	10,075	100.00
37	McLean	4			9,340
	Lake Erie & Western Illinois Central. Chicago & Alton. Cleveland, Cincinnati, Chicago & St. Louis		1 2 1 1	5,000 3,540 600 200	53,53 37,90 6,42 2,15
38	Kankakee	. 2			7,935
	Chicago, Indiana & Southern Illinois Central		1	3,968 3,967	50.00 50.00

Table 45—Concluded.

Number.	Counties and Railroads.	Number of railroads.	Number of mines.	Tons delivered to each railroad.	Total tons shipped and per cent to each road.
39	Rock Island	1			7,303
	Chicago, Rock Island & Pacific		1	7,303	100 00
40	Moultrie	1			2,045
	Vandalia Line		1	2.045	100.00
41	Jefferson	1			800
	Louisville & Nashville		1	800	100.00
	By boat—Illinois river				21,730
	Peoria county		2	21,730	100.00
	By boat—Hennepin canal				3,565
	Henry county		1_	3,565	100.00
	The State			43,007,015	

Table 46 presents a list of the forty-one counties representing the 390 shipping mines. This table gives the number of mines in each county, the number of railroads hauling the coal from each county, the total tons of coal produced in each county, also the total tons of coal delivered to the roads for shipment, with the distribution of the remaining tonnage. Thirteen of the counties each furnish over one million tons for shipment, the aggregate being 34,689,145 tons, or 80,65 per cent of the total shipped from all the counties. It is also shown there is forty railroads which haul all coal shipped.

Table 46—Counties from Which Coal Is Shipped, Number of Shipping Mines, Total Output, Tons Shipped, Supplied to Locomotives, Sold to Local Trade, and Consumed or Wasted at the Mines—1910.

_	Counties.	nines		1	Distribution—Tons.				
Number.		Number of mines	Number of railroads.	Total tons shipping mines.	Shipped from mines.	Supplied to locomo- tives at the mines.	Sold to local trade.	Consumed and wasted at the mine.	
1	Williamson	38	6	5, 858, 413	5,547,358	14.450	34,177	262,428	
2	Sangamon	31	9	5,076,961	4,706,433	83,531	140,898	146,099	
3	St. Clair	55	8	4,060,898	3.748,869	76,226	70,733	165,070	
4	Macoupin	17	6	4,029,606	3,753,550	32,214	45,962	197,880	
5	Madison	16	9	3,647,452	3,448,814	15,014	71.056	112,568	
6	Saline	17	2	3,055.065	2,965,018	1.116	33,643	55,288	
7	Franklin	10	4	2,071,143	1,988,687		24.899	57,557	

Table 46-Concluded.

		nines				Distribut	ion—Tons.	
Number.	Counties.	Number of mines	Number of railroads.	Total tons shipping mines.	Shipped from mines.	Supplied to locomo- tives at the mines.	Sold to local trade.	Consumed and wasted at the mine.
8	Fulton	22	3	1,867,017	1,768,844	29,618	21,087	47,468
9	Vermilion	14	4	1,832,600	1,775,910	25,300	6,394	24,996
10	Montgomery	10	7	1,804,683	1,616,785		147,193	40,705
11	Perry	18	3	1,384,810	1,135,631	52,191	155,037	41,951
12	Bureau	7	4	1,326,430	1,200,401	31,911	39,984	54,134
13	LaSalle	15	8	1,302,348	1,032,845	107,292	95,551	66,660
14	Christian	8	5	1,292,876	964,808	75,539	195, 421	57,108
15	Marion	7	3	1,065,268	879,960	111,285	33,190	40,833
16	Clinton	4	2	1,000,935	869,038	54,735	12,695	64,467
17	Grundy	9	3	902,804	852,474		20,130	30,200
18	Randolph	10	3	831,428	795,900		10,668	24,860
19	Peoria	18	4	799,994	751,856	7,000	6,191	34,947
20	Jackson	10	3	646, 447	531,710	41,300	26,551	46,886
21	Logan	4	2	475,536	381,386	21,892	50,260	21,998
22	Putnam	2	1	470,132	443,088	3,878	7,594	15,572
23	Marshall	5	5	370,354	295,892	40,277	18,208	15,977
24	Menard	7	2	321,443	277,839	4,243	26,017	13,344
25	Mercer	4	3	275, 237	257,271	1,548	6,913	9,505
26	Macon	5	4	265, 530	114,211		141,391	9,928
27	Livingston	2	3	190,207	151,436	13,611	8,535	16,625
28	Woodford	2	2	170,235	143,098	5,380	12,041	9,716
29	Shelby	2	3	143,867	126,440		13,234	4,193
30	Will	2	2	134,851	120,837		9,777	4, 237
31	Tazewell	5	4	131,197	91,699	1,000	34, 518	3,980
32	Bond	1	1	103,537	96,830		1,507	5,200
33	McLean	2	4	101,860	9,340	25,012	54,247	13,261
34	Henry	3	2	78,570	64,150		12,798	1,622
35	Gallatin	2	1	69,015	58,139	4,582	1,207	5,087
36	White	1	1	23,780	12,310	5,247	5,140	1,083
37	Stark	1	1	12,479	10,075		2,204	200
38	Jefferson	1	1	8,485	800		6,915	770
39	Kankakee	1	2	8,435	7,935		150	350
40	Rock Island	1	1	7,753	7,303		150	300
41	Moultrie	1	1	5,520	2,045		1,875	1,600
	The State	390	40	47,225,201	43,007,015	885,392	1,606,141	1,726,653
			1					

DAYS OF ACTIVE OPERATION.

Table 47 presents by districts the number of mines, men and average days the mines were in operation during the year. The average number of days for the shipping mines was 179. As 95.8 per cent of all men are employed at these mines, the number of days shown represent the condition of days worked.

Table 47—Days of Active Operation by Districts.

			Mines,	Men and	Average	Workin	ng Days.	rs.								
Districts.		All Mine	s.	Shi	pping M	ines.	Lo	Local Mines.								
	Mines.	Men.	Days.	Mines.	Men.	Days.	Mines.	Men.	Days.							
First	58	7,412	185.96	29	7.086	202.46	29	326	170.03							
Second	216	8,951	160.05	- 37	8,064	182.03	179	887	155.69							
Third	120	5,488	178,47	46	4,988	193.32	74	500	169.6							
Fourth	108	7,255	168.84	31	6,875	170.26	77	380	167.91							
Fifth	60	6,470	196,55	30	6,137	170.29	30	333	217.57							
Sixth	37	7,146	181.91	27	7,069	185.43	10	77	173.80							
Seventh	44	7,247	176.00	28	7,002	188,46	16	245	154.19							
Eighth	86	6,337	180.19	65	6.175	175.40	21	162	191.62							
Ninth	73	9,360	146.62	49	9,279	169.11	24	81	104.42							
Tenth	79	8.968	165.29	48	8,845	163.72	31	123	167.68							
The State	SS1	74,634	170.60	390	71.520	179,14	491	3,114	164.51							

Table 48 presents for a series of eleven years the number of days of active operation of all mines; also of shipping and local mines. The average working days for shipping mines this year, which is 179.14, is less than for any of the previous years shown.

Table 48—Days of Active Operation, for a Series of Eighteen Years.

			Mines,	Men and	Average	e Workii	ng Days.		
Year.	4	All Mines	S.	Shi	pping M	ines.	L	ocal Min	es.
	Mines.	Men.	Days.	Mines.	Men.	Days.	Mines.	Men.	Days.
1900	920	39,384	182.6	323	36,298	214.0	597	3,084	166.4
1901	915	44,143	174,3	331	40,940	204.4	584	3,217	. 157
1902	915	46,005	179.5	332	42,807	210.2	583	3,198	161.9
1903	933	49,814	192.1	353	46,494	221.8	580	3,320	170.7
1904	932	54,774	197.9	380	51,384	213.3	552	3,399	184.9
1905	. 990	59, 230	173.7	397	55,743	198.5	593	3,487	158
1906	1,018	62,283	172.0	419	58,851	189,6	559	3,432	160.3
1907	933	66,714	184.1	411	63,154	209,3	522	3,500	164.2
1908	922	70,841	171.44	407	67,470	190.6	515	3,371	160.69
1909	886	72,733	168.43	384	69,518	188,64	502	3,215	154.84
1910	881	74,634	170,60	390	71,520	179.14	491	3,114	164.51

VALUE OF COAL PER TONS.

Table 49 presents for four years by districts, the total tons of all grades produced by the shipping mines of the State, together with the average value per ton at the mines. These average values are derived from the aggregate value, placed by each operator on the total product of each respective mine. The average value for the State is seven cents higher than last year. The local mines are shown in one item at the bottom of this table.

Table 49—Total Tons, Shipping Mines, All Grades and Average Value per Ton at the Mines, by Districts, Also Local Mines for Four Years.

	191	10,	190	1909. 1908. 19				7.
Districts.	Total tons— all grades.	Average value per ton.	Total tons— all grades.	Aver- age value per ton.	Total tons— all grades.	Average value per ton.	Total tons— all grades.	Aver- age value per ton
First	2.818,570	\$1.502	3.001,324	\$1.472	2,768.645	\$1.472	2,979,910	\$1.43
Second	3,555,007	1 296	2,098,051	1.416	2,157,151	1.352	2,415,920	1.43
Third	2,573,305	1.271	2,082,629	1,323	2,130,461	1.346	2,043,203	1.30
Fourth	5,076,961	0.979	2,460,633	1.183	2,411,554	1.124	2,296,063	1.19
Fifth	3,540,393	1.028	3,739,870	1.007	2.705,468	1.017	2,096,833	1.01
Sixth	5,834,289	0.918	5,896,017	0.935	5.840,028	0.973	5,693,210	0.92
Seventh	5.817,192	0.906	6,922,019	0.888	7.173,183	0.944	6,657,746	0.94
Eighth	4,892,326	0.921	6,604,666	0.819	7,930,813	0.889	7,991,535	0.85
Ninth	6,612,298	0.913	8,652,710	0.985	6,242,678	0.95	5, 563, 602	0.95
Tenth	6,504,860	0.938	6,500,643	0.943	8,449,749	0.943	7,698,816	0.95
Shipping mines.	47, 225, 201	\$1.016	47,958,562	\$1.01	47.809.730	\$1.02	46, 436, 839	\$1.02
Local mines	1,492,652	1.49	1,205,148	1,489	1.462,722	1.495	1,361,782	1.50

EMPLOYMENT AT THE MINES.

Table 50 is a classification of all employés in and around the coal mines of the State during the year. The showing of shipping mines is by districts and presents geographically the distribution of the employés working at this class of mines. The shipping mines employed 71,520, or 95.8 per cent of the total number of employés at all mines of the State; of this number, 65,686, or 91.8 per cent, were working underground; of these, 55.6 per cent were miners, 42.7 per cent other employés, and 1.7 per cent were boys. The number of boys employed underground in shipping mines this year shows a decrease of 619 from last year, there being a decrease in each district with the exception of the fourth and tenth districts. The local mines show an increase of twenty-one boys employed underground this year, there being a total of twenty-four for the year.

Table 50—Classification of Employés in Shipping Mines, by Districts, with the Employés of Local Mines.

	All F	Imployés U	ndergroui	nd.	Emplo	yés above ound.	T-+-1	Grand
Districts.	Miners.	Other employés	Boys.	Total.	Boys.	Other employés	Total.	total.
First	5,169	1,249	105	6,523	11	552	563	7,08
Second	5,428	1,964	79	7,471	1	592	593	8,06
Third	3,312	1,114	92	4,518	1	469	470	4,98
Fourth	4,336	1,954	- 94	6,384	5	486	491	6,87
Fifth	4,090	1,465	122	5,677	3	457	460	6,13
Sixth	. 1,736	4,597	167	6,500	10	559	569	7,06
Seventh	2,488	3,873	80	6,441	6	555	561	7,600
Eighth	3,151	2,481	66	5,698	3	474	477	6,17
Ninth	2,304	6,055	119	8,478		801	801	9,27
Tenth	4,519	3,271	206	7,996	2	847	849	8,84
Total	36,533	28,023	1,130	65,686	42	5,792	5,834	71,520
Local mines	2,536	114	24	2,674	5	435	440	3,114
The State	39,069	28,137	1,154	68,360	47	6,227	6,274	74,63

Table 51 presents the classification of mines and other employés in and around all the mines in the State for a series of twelve years. This table shows a decrease of 11,765 miners from last year, while other employés underground shows an increase of 14,349; this is due to the fact that where machines are used in mining, a large number who were formerly classed as miners are now classified as machine men. The number of boys employed underground this year is shown to be only 1,154, or a decrease of 598 from last year. This is 122 less boys than for any of the years shown in this table.

Table 51—Classification of Employés in All Mines for Twelve Years.

	All I	Employés U	ndergrour	nd.	Above (Fround.			
Year.	Miners.	Other employés	Boys.	Total.	Boys.	Others.	Total.	Grand total.	
1899	26, 449	5,455	1,295	33,199		3,792	3,792	36,99	
1900	27,875	6,047	1,281	35,203		4,181	4,181	39,38	
1901	30,829	7,595	1,326	39,750		4,393	4,393	44,14	
1902	32,875	7,273	1,397	41,518		4,487	4,487	46,00	
1903	34,904	8,526	1,276	44,703		5,111	5,111	49,81	
1904	37,987	9,812	1,562	49,361		5,413	5,413	54,77	
1905	41,202	10,694	1,540	53,436		5,794	5,794	59,23	
1906	42,920	11,605	1,499	56,024		6,259	6,259	62,28	
1907	45,498	13,026	1,595	60,119		6,596	5,596	66,71	
1908	48,931	13,929	1,564	64,424		6,417	6,417	70,84	
1909	50,834	13,788	1,752	66,374	71	6,288	6,359	72,73	
1910	39,069	28,137	1,154	68,360	47	6,227	6,274	74,63	
Percentincrease	47.7	415.8	*10.9	105.9		64.2	65.5	101.8	

^{*} Decrease.

Table 52 shows, for a series of twenty-eight years, the number of men employed by districts.

Table 52—Employés in Coal Mines of the State for a Series of Twentyeight Years, by Districts.

					Dis	stricts.					
Year.	First.	Second.	Third.	Fourth.	Fifth.	Sixth.	Seventh.	Eighth.	Ninth.	Tenth.	The State.
1883	7,566	3,211	4,070	4,417	4,675						23,939
1884	8,013	3,616	5,018	4,781	4,147						25,575
1885	7,463	3,391	5,213	4,950	4,429						25,446
1886	7,613	3,599	4,870	5,197	4,567						25,846
1887	7,915	4,068	4,903	4,934	4,984						26,804
1888	8,623	4,914	5,250	5,086	5,537						29,410
1889:	9,014	4,498	5,117	5,679	5,764						30,076
1890	8,250	4,099	5,171	5,685	5,361						28,574
1891	9,128	5,089	6,458	5,881	6,395						32,951
1892	9,572	4,865	6,453	6,542	6,200		·				33,632
1893	8,831	5,974	6,964	7,021	6,780						35,390
1894	10,280	6,714	7,112	7,750	6,621						38,477
1895	9,644	7,184	6,607	8,005	7,190						38,630
1896	9,380	7,103	2,134	4,467	5,758	4,374	3,816				37,032
1897	7,632	6,872	1,635	4,021	5,672	4,100	3,856				33,788
1898	7,377	6,799	1,800	3,030	6,093	4,662	4,265				35,026
1899	7,498	6,631	1,789	4,655	6,401	5,008	4,999				36,991
1900	7,722	5,693	3,864	5,545	5,983	5,885	4,692				39,384
1901	7,872	6,306	3,760	6,950	6,837	6,871	5,457				44,143
1902	8,035	6,583	4,268	5,579	7,564	7,929	5,947				46,005
1903	7,717	6,860	4,363	6,771	8,393	8,354	7,356				49,814
1904	8,038	7,362	4,808	7,293	9,541	9,665	8,067				54,774
1905	8,157	7,761	5,397	7,441	10,175	10,636	9,663				59,230
1906	7,091	6,293	3,623	3,845	3,997	7,856	6,895	8,633	6,380	7,670	62,283
1907	6,950	5,837	3,957	4,045	4,671	7,729	7,827	8,343	7,234	9,121	66,714
1908	6,800	5,802	4,125	4,306	4,357	8,044	9,054	9,362	7,928	11,063	70,841
1909	7,141	5,651	4,399	4,210	6,153	8,305	8,068	8,914	12,028	7,864	72,733
1910	7,412	8,951	5,488	7,255	6,470	7,146	7,247	6,337	9,360	8,968	74,634

CLASSIFICATION OF EMPLOYES IN SHIPPING MINES.

Table 53 presents, by districts and counties, all shipping mines of the State, being arranged under name of operator, giving the location of mine, classified number of employés in each occupation, total classified, number not classified, total number of employés, number of days in operation and tons produced by each mine.

Table 53—Classification of Employés, and the Total Number of Men Was in Operation During the Year

GRUNDY COUNTY— Classified Number of

Number.	Name of Operator.	Postoffice address or location of mine.	Cagers.	Drivers.	Laborers.	Loaders.	Machinemen.
3	C, W, & V, C, Co Big Four Wilme C, Co. Big Four Wilme C, Co. Braceville Coal Co. C, W, & V, Coal Co. Wilm Star Mining Co. Big Four Wilm. Coal Co. C, W, & V, Coal Co. Wilm, Star Mining Co. Acme Wilmington Coal Co. Total	Braceville So. Wilmington Coal City Carbon Hill So. Wilmington Coal City Braceville	3 4 5 3 1 4 1 1 1 22	33 23 25 29 25 17 6 12 3	16 1 1		
				KA	NKAK	EE COU	JNTY-
1	Clarke City Wilmington Coal Co	Clarke City	2	4	2		
					LASAL	LE COU	JNTY-
	Oglesby Coal Co. La Salle Co. Carbon Coal Co., 1. La Salle Co. Carbon Coal Co., 5. C. W. & V. Coal Co., 2. C. W. & V. Coal Co., 3. LaSalle Co. Carbon Coal Co., Union. LaSalle Co. Carbon Coal Co., LaSalle. LaSalle Co. Carbon Coal Co., Rockwell. Illinois Zinc Co., 1. Cahill Coal Co.	Streatordo Peru La Salle	2 3 3 3 2 4 3 3	30 29 12 15 11 22 20 22 18 16	10 11 10	5 2 5 4 2	
11	Cahill Coal Co. Acme Coal Co. Harrison Coal Co. Harrison Coal Co. Mrs. E. Hakes. Streator Fuel Co. Spicer Coal Co.	Streator	2 2 2 2 1 1 1 33	216	3 	1 19	JNTY-

Employed in Shipping Mines, with the Number of Days Each Mine and the Total Tons Produced—1910.

FIRST DISTRICT.

FIRST DISTRICT.

Employes in Each Occupation.

Miners.	Shotfirers.	Timbermen.	Trackmen.	Trappers.	Total classified.	Number not classified.	Total number all employés	Number of days in operation	Total tons produced.	Vumber
330 305 315 220 187 167 130 103 22		25 3 6 4 2 2	4 3 6 24 2 2 12 1	2 2 2 2 2	397 340 373 282 218 192 151 120 27	32 45 40 26 39 41 15 27 2	429 385 413 308 257 233 166 147 29	177 212 184 176 201 208 206 222 215	167,270 155,982 143,652 105,610 95,574 83,785 78,448 68,103 4,378	
1,779		43	55	10	2,100	267	2,367	200	902,804	
65	2	6	1	2	84	13	97	73	8,435	
IRST	DISTR	ICT.								
276 270 191 225 175 210 207 175 107 115 60 62 45 31	DISTR	1 1 3 10 8 8 3 3 11 1 2 2 1 1	4 3 2 6 8 8 3 2 2 2 2 3 2 3 1 1 1	1 5 3 3 3 3 3 3 5 8 8 2 2 1 1 2 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3	335 316 216 2172 218 250 239 166 151 73 74 60 64	577 633 533 166 122 599 40 229 17 166 199 144	392 379 269 288 230 309 298 249 195 168 89 93 74 64	195 188 206 201 222 212 210 208 304 191 205 200 154 138 3	173,112 153,320 131,974 127,449 116,576 115,454 100,055 96,337 90,687 56,058 49,949 44,996 17,765 19,370 9,246	
276 270 191 225 175 210 207 175 107 115 60 62 45 45	DISTR	1 3 10 8 3 3	1	1 5 3 3 3 3 3 3 5 5 8 8 2 1 1 2 2 3 3	316 216 272 218 250 239 166 151 73 74 60	53 16 12 59 59 40 29 17 16 19	379 269 288 230 309 298 249 195 168 89 93 74	188 206 2011 222 212 210 208 304 191 205 200 154 138	153,320 131,974 127,449 116,576 115,454 100,055 96,337 90,687 56,058 49,949 44,996 17,765 19,370	
276 270 191 225 175 210 207 175 60 62 45 45 31 2,194	DISTR	1 3 10 8 3 3 11 1 2 2 1 34	1		316 216 272 218 250 239 209 166 151 73 74 60 64	53 16 12 59 59 40 29 17 16 19 14	379 269 288 230 309 298 249 195 168 89 93 74 64	188 206 201 222 212 210 208 304 191 205 200 154 138 226	153,320 131,974 127,449 116,576 115,454 100,055 96,337 90,687 56,058 49,949 44,996 17,765 19,370 9,246	

86,016

134,851

Table 53-

FIRST DISTRICT-

					Clas	sified Nu	ımber of
Number.	Name of Operator.	Number of mines.	Cagers.	Drivers.	Laborers.	Loaders.	Machinemen.
2	Grundy Kankakee LaSalle Putman Will.	9 1 15 2 2 2	22 2 33 9 3 69	173 4 216 45 29 467	18 2 72 40 132	19	

BUREAU COUNTY-

					Clas	sified Nu	ımber of
Number.	Name of Operator.	Postoffice address or location of mine.	Cagers.	Drivers.	Laborers.	Loaders.	Machinemen.
2 3 4 5 6	Spring Valley Coal Co. Spring Valley Coal Co. Spring Valley Coal Co. Sp. ing Valley Coal Co. Illinois Third Vein Coal Co. Spring Valley Coal Co. St. Paul Coal Co. Marquette Third Vein Coal Co. Total.	Dalzell Spring Valley Ladd Seaton ville Cherry Marquette	2	38 39 39 35 32 34 29	47 43 50 30 48 14 25		4

FULTON COUNTY-

2 Maplewood Colliery Co. Fai mington. 2 34 19 3 Canton Coal Co. Canton. 3 17 18 4 Big Creek Coal Co. St. David. 26 12 5 Simmons Coal Co. Canton. 2 12 16	185	24
3 Canton Coal Co Canton 3 17 18 4 Big Creek Coal Co St. David 26 12 Simmons Coal Co Canton 2 12 16	185	24
3 Canton Coal Co	185	24
4 Big Creek Coal Co. St. David 26 12 5 Simmons Coal Co. Canton 2 12 16		
5 Simmons Coal Co		
6 Maplewood Coal Co	77	
7 Big Creek Coal Co		14
13 Star Coal Co. Flatt 2 8		
		4
15 National Coal Mining CoMiddle Grove 2 6 1	30	6
16 Big Creek Coal Co. Cuba. 2 15 5		
19 Astoria Woodland Coal Co. Astoria 1 2		
21 Star Coal Co		
22 J. R. Riley Breeds 1		
22 S. R. Hilley		
Total 37 289 145	292	48
1000		10

RECAPITULATION BY COUNTIES:

Employ	és in each	Occupa	tion.							
Miners.	Shotfirers.	Timbermen.	Trackmen.	Trappers.	Total classified.	Number not classified.	Total number all employés	Or cately of six	Total tons produced.	Number.
1,779 65 2,194 851 280	2	43 6 34 14 13	55 1 69 6	10 2 42 10	2,100 84 2,679 975 320	267 13 464 125 59	2,367 97 3,143 1,100 379	200 73 204 194 210	902,804 8,435 1,302,348 470,132 134,851	1 2 3
5,169	2	110	135	65	6,158	928	7,056	195	2. \$1\$, 570	-

SECOND DISTRICT.

mploy	és in Eac	lı Occup	ation.						
Miners.	Shotfirers.	Timbermen.	Trackmen.	Trappers.	Total classified.	Number not classified.	Total number all employés	Number of days in operation	Total tons produced.
439		4	4	19	553	40	593	192	237,821
454		5	3	14	560	62	622	167	212,522
516		4	4	32	647	42	689	165	203,336
380		15	4	18	485	71	556	198	192,692
354		5	3	17	463	59	522	181	179,706
435		14	5	12	518	40	558	106	163,044
275		4	4	11	352	33	385	175	137,309
2,853		51	27	123	3,578	347	3,925	169	1,326,430

SECOND DISTRICT.

300	2	4	5	6	361	50	411	196	210,549	
310	4	5	4	3	381	17	398	144	186,961	
155	2	4	4	5	208	18	226	215	164,105	
16	2	4	4	1	277	37	314	154	144,570	
116	2	4	4	-2	156	13	169	210	134,784	
110	1 4	9	3	3	236	10	236	147	132,346	
175	4			6	244	25	269	133	121,973	
98	4	5	5		197	13	210	172	117,091	
154	2	2	2	3			210		110,379	
120	2		2	2	149	28	177	191		١,
92	2		1	2	113	21	134	196	89,596	
120		1	1		141	15	156	178	82,553	
84	2		2	3	106	9	115	192	82,299	1:
56	2		2	2	72	20	92	220	62.896	
85		1	2		102	14	116	186	53,415	
15	2	1	1		64	9	73	181	45,859	
125	2	2	2	3	156	19	175	150	44,801	
39	I	2	2		53	8	61	165	23,572	
35	2		Ī		49	5	54	153	18,539	
18	2		î		24	4	25	199	13,182	
21	2		1		24	í	25	202	10,280	
33	2		1		40	13	53	68	9,267	
99	2		1		10	2	12	200	8,000	
8					10	-	12	200	.,000	
0.170	-10	44	50	42	3,163	341	3,504	175	1,867,017	
2,176	40	4-1	90	42	0,100	0.41	0.004	110	4, 01,011	

Table 53-

HENRY COUNTY-

					Class	sified Nu	mber of
Number.	Name of Operator.	Postoffice address or location of mine.	Cagers,	Drivers.	Laborers.	Loaders.	Machinemen.
1 2 3	Kewanee C. & M. Co. Atlas Coal Co. Donahoo C. Co. Total		2 1 3	10 2	2		

MERCER COUNTY-

1 Coal Valley M. Co 2 Empire Coal Co 3 Coal Valley M. Co 4 Alden Coal Co	Gilchrist Mathersville	2		8	
Total		4	38		

ROCK ISLAND COUNTY-

1 Volunteer Coal Co	Cool Wollow	9	9	
1 volunteer Coal Co	Coar vaney	 2	2	

SECOND DISTRICT-

					Clas	sified Nu	ımber of
Number.	Name of Operator.	Number of mines.	Cagers.	Drivers.	Laborers.	Loaders.	Machinemen.
11 2 3 4 5	Henry Mercer	22 2	21 37 3 4 65	246 289 12 38 2 587	257 145 2 28 28 2	292	48

SECOND DISTRICT.

Employ	és in Eac	ch Occup	ation.							
Miners.	Shotfirers.	Timbermen,	Trackmen.	Trappers.	Total classified.	Number not classified.	Total number all employés	Number of days in operation	Total tons produced.	Monthean
90 22 5	1	2	3		107 27 6	8 3	115 27 9	232 180 270	63,415 9,155 6,000	
117	1	2	3		140	. 11	151	227	78,570	

SECOND DISTRICT.

107 92 38 35	4 2	4 2 1	4 2 1	 167 114 44 37	29 49 21 5	196 163 165 42	223 200 125 55	164,399 81,793 22,603 6,442	1 2 3 4
272	6	7	7	 362	104	466	151	275, 237	

SECOND DISTRICT.

10	2	 	 16	2	18	183	7,753	1

RECAPITULATION.

mploy	és in eac	h Occupa	ation.						
Miners.	Shot firers.	Timbermen.	Trackmen.	Trappers.	Total classified.	Number not classified.	Total number all employés	Number of days in operation	Total tons produced.
2,853 2,176 117 272 10	40 1 6 2	51 44 2 7	27 50 3 7	123 42	3,578 3,163 140 362 16	347 341 11 104 2	3,925 3,504 151 466 18	169 175 227 151 183	1,326,430 1,867,017 78,570 275,237 7,753
5,428	49	104	87	165	7,259	805	8,064	181	3,555,007

Table 53→

LIVINGSTON COUNTY-

-				Classified Number of					
Number.	Name of Operator.	Postoffice address or location of mine.	Cagers.	Drivers.	Laborers.	Loaders.	Machinemen.		
1 2	Cardiff Coal Co	Cardiff Fairbury	3	22 3	5 5				
	Total		4	25	10				
	,				LOG	AN COL	UNTY-		
1 2 3 4	Latham Coal Co. Citizens Coal Mining Co. Lincoln Mining Co. Mt. Pulaski C. Co.	do	4 2 8	25 24 13 3	12	3			
	Total		14	65	12	3			
1 2	McLean County C. Co		2 1 3	14 3 17	35				
_				М	ARSHA	LL CO	JNTY-		
1 2 3 4 5	Toluca Coal Co. Wenona Coal Co. Fulton County Coal Co. Lacon Coal Co. Barr Coal Co. Total	Wenona Sparlanddododo	8	38 15 3 2 2 2	18 1 2 21				
					MENA	RD COU	UNTY-		
1 2 3 4 5 6 7	Wabash Coal Co Middletown Coal Co Athens Mining Co South Mountain Coal Co Tallula Coal Co Greenview Mining Co Tice Coal Co Total	Petersburg Tallula Greenview Tice	1 2 2 2 1 1 1 1	12 10 10 4 5 2 3	4 2 2 2 8				

THIRD DISTRICT.

Miners.	Shotfirers.	Timbermen.	Trackmen.	Trappers.	Total classified.	Number not classified.	Total number all employés	Number of days in operation	Total tons produced.
223 24	2 2	3 1	4	5 1	267 37	58 5	325 42	187 232	166,395 23,812
247	4	4	4	6	304	63	367	209	190, 207

THIRD DISTRICT.

225 103 86 16	4 4 2 2	4 4 3 1	1 2 1	18 13 6	296 152 121 23	30 33 58 3	326 185 179 26	205 192 166 180	234,866 125,755 106,428 8,487	1 2 3 4
430	12	12	7	37	592	124	716	186	475, 536	

THIRD DISTRICT.

160 13	2	4 2	4	1	220 22	19 9	239 31	226 254	88,000 13,860	1 2
173	2	6	5	1	242	28	270	240	101,860	

THIRD DISTRICT.

481 185 20 15 8	5 2 1	7 2	13	550 224 25 18 12	142 50 7 1 2	692 274 32 19 14	227 203 206 204 197	234,927 107,401 14,102 7,629 6,295	1 2 3 4 5
709	 8	. 9	14	829	202	1,031	207	370, 354	

THIRD DISTRICT.

77 87 68 44 35 23 30	3 2 2 2		6 1 2 1 1	2	108 104 95 53 47 30 36	15 16 10 22 9 6 3	123 120 105 75 56 36 39	176 165 120 193 201 230 180	\$3,675 69,028 52,077 38,063 32,078 26,022 20,500	1 2 3 4 5 6
364	11	20	11	3	473	81	554	181	321.443	
	}									

Table 53-

PEORIA COUNTY-

-					Class	ified Nu	mber of
Number.	Name of Operator.	Postoffice address or location of mine.	Cagers.	Drivers.	Laborers.	Loaders.	Machinemen.
2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17	Mapleton Coal Co Newsam Bros Aug. Reents Olympia Coal Mining Co	do Hanna City Peoria Bartonville Edwards Mapleton Feoria Kramm Edwards Kingston Mine do Hollis Kramm Mapleton	1	15 9 8 4 4 8 7 3 3 6 6 4 4 4 4 4 7	1 4 2 1 2 6 6 3 3 3 3 3 3 0	16	2 4 4 16
1	James Highbee	Wyoming	1	I	STA 2	RK COT	JNTY
-		1	<u> </u>	T.	AZEWE	LL CO	JNTY-
2 3 4	Tazewell Coal Co. Eastern Coal Co. Grant Bros. Champion Coal Co. Phoenix Coal Co. Total	do	2 1 1 1 1 1	10 2 3 2 2 2	3	40	8
_		•		wo	ODFO	RD COU	NTY-
1 2	Roanoke Coal Co	Minonk	2 2	19 18	15 10		
	Total		4	37	25		

THIRD DISTRICT.

THIRD DISTRICT.

228

121

349

 $\frac{2}{2}$

2 2

Employ	és in Eac	eh Occup	ation.							
Miners.	Shotfirers.	Timbermen.	Trackmen.	Trappers.	Total classified.	Number not classified.	Total number all employés	Number of days in operation	Total tons produced.	Number.
144 114 90 40 75 59 53 30 30 37 22 40 24 30 14 14 20	2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	4 2 1 1 1	4 3 1 1 1 4 2 1	1	183 141 113 67 87 78 53 40 38 37 37 37 32 49 36 30 21 20 32	35 29 9 7 11 11 18 7 4 3 21 2 10 4 15 4	218 170 122 74 98 89 71 47 42 40 58 34 59 40 45 25 20 35	198 193 1990 2000 170 198 245 204 169 146 221 150 226 103 180 154 50	148, 735 122, 289 76, 669 72, 837 55, 483 49, 369 48, 908 46, 733 28, 590 27, 843 25, 773 22, 790 19, 800 18, 400 0, 719 6, 680 4,000	1 2 3 4 4 5 6 7 7 8 9 10 11 12 13 14 15 16 17 18
866	26	15	19	13	1,094	193	1,287	176	799,994	
	DISTR	ICT.					1			_
31			1		36		36	202	12,479	1
THIRD	DISTR	ICT.								
21 40 27 30 25	2 2 2	2 2 1	1 1 2	2	89 49 33 33 32	12 9 3 3 7	101 58 36 36 39	196 215 189 180 75	61,287 23,000 19,947 18,406 8,557	1 2 3 4 5
143	6	5	4	2	236	34	270	171	131,197	

 $\frac{273}{159}$

432

 $\frac{281}{176}$

457

8 17

25

 $\frac{233}{182}$

207

113,473 56,762

170.235

Table 53—

THIRD DISTRICT-

					Clas	sified Nu	mber of
Number.	Name of Operator.	Number of mines.	Cagers.	Drivers.	Laborers.	Loaders.	Machinemen.
2	Livingston Logan McLean Marshall Menard Peoria Stark Tazewell Woodford Total	4 2 5 7	14 14 3 8 10 14 1 6 4	25 65 17 60 46 79 1 19 37	10 12 35 21 8 30 2 3 25	3 16 40 59	16 8

SANGAMON COUNTY-

Name of Operator.	Postoffice address or location of mine.					ı.
		Cagers.	Drivers.	Laborers.	Loaders.	Machinemen
Barclay Coal & Mining Co Springfield Co-operative Coal Co Williamsville Coal Co	Barclay Springfield Selbytown Dawson Springfield .do .do .do .do .do .do .do .do .do .d	4 3 4 4 4 10 2 4 4 3 4 4 2 2 2 2 2 2 2 2 2 2 2 2 2 2	36 14 30 20 30 26 23 13 26 30 10 20 20 21 16 9 22 16 17 7 8 15 9 3 3 20 20 20 20 20 20 20 20 20 20 20 20 20	16 9 17 7 20 22 22 10 8 18 8 8 8 8 8 8 5 5 2 2 6 6 6 2 2 3 3	264	48

RECAPITULATION BY COUNTIES.

$ \begin{array}{cccccccccccccccccccccccccccccccccccc$	Miners.	Shotfirers.	Timbermen.	Trackmen.	Trappers.	Total classified.	Number not classified.	Total number all employés	Number of days in operation	Total tons Produced.
	430 173 709 364 866 31	12 2 11 26	12 6 8 20 15	7 5 9 11 19	37 1 14 3 13	592 242 829 473 1,094 36	124 28 202 81 193	716 270 1,031 554 1,287 36	186 240 207 181 176 202	475,536 101,860 370,354 321,443 799,994 12,479

FOURTH DISTRICT.

Total tons	Employés in Each	Оссир	ation.							
289 6 3 3 8 335 41 376 202 360.906 2 288 4 4 6 8 361 21 382 214 334.902 33 354.902 33 354.902 33 354.902 33 364.902 33 36.902 33 36.902 33 36.902 33 36.902 33 36.902 33 36.902 33 36.902 33 36.902 33 36.902 33 36.902 33 36.902 33 36.902 33 36.902 33 36.902 33 36.902 33 36.902 36.902 33 36.902 32 36.902 33 36.902 37.902 36.902 37.902 37.902 37.902 37.903 36.902 37.902 37.903 38.403 36.902 37.902 37.902 37.902 37.902 37.902 37.902 37.902 37.902 37.902 37.902 37.902 37.902<	Miners.	Timbermen.	Тгасктеп.	Trappers.		not	number	of days in	Total tons produced.	Number.
120 6 2 1 3 155 10 165 134 67.688 30 110 6 4 2 3 145 9 154 115 44.48 31 4,336 103 114 130 129 6,175 700 6,875 170 5.076,961	288 4 250 6 300 6 225 4 210 4 210 4 200 4 2111 2 111 2 110 4 90 2 80 3 110 4 95 2 111 2 100 4 95 2 111 2 100 4 95 2 111 2 100 4 95 2 112 2 111 2 110 4 96 2 110 3 110 4 110 6 110 6	3 4 6 12 3 8 12 3 6 6 4 6 2 2 2 2 2 6 6 4 2 2 2 2 1 1 1 1 2 1 2 2 4 4	3 6 6 20 3 10 6 4 4 8 6 6 22 22 22 2 2 4 3 2 2 6 3 3 2 2 2 2 1 2 1 2 2 2 2 2 2 2 2 2 2 2	8 8 3 3 13 3 7 7 6 8 8 8 8 8 9 1 4 2 2 2 2 2 2 2 3 3 4 3 3 1 4 4 1 1 3 3 3 3 3	335 361 315 361 316 317 307 305 281 258 260 265 191 201 188 119 143 143 148 119 166 169 170 188 119 188 119 188 119 188 119 188 119 188 119 188 189 189	41 21 26 44 44 38 38 22 20 22 18 23 17 16 16 16 16 18 19 26 19 19 19 19 19 19 19 19 19 19 19 19 19	376 382 341 398 341 403 305 290 280 287 209 224 205 156 164 149 155 133 131 142 155 156 165 165	202 214 214 214 1588 214 150 219 150 190 190 195 200 177 177 178 173 169 169 169 169 169 177 177 178 178 178 178 178 178 178 178	360, 906 354, 992 348, 940 340, 331 315, 627 25, 643 242, 469 217, 216 198, 197 197, 195 164, 897 150, 691 147, 451 110, 256 6, 729 6, 232 5, 88, 61 81, 624 81, 539 8	4 5 6 6 7 8 9 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 6 27 29 30

Table 53-

FOURTH DISTRICT-

-					Clas	sified Nu	imber of
Number.	Name of Operator.	Number of mines.	Cagers.	Drivers.	Laborers.	Loaders.	Machinemen.
1	Sangamon	31	83	541	180	469	90

CHRISTIAN COUNTY-

					Clas	sified N	umber of
Number.	Name of Operator.	Postoffice address or location of mine.	Cagers.	Drivers.	Laborers.	Loaders.	Machinemen.
2 3 4 5 6 7	Christian County Coal Co Springfield Coal Mining Co., No. 6. Prana Coal Co., No. 1 Stonington Coal Co. Penwell Coal Co., (Penwell) Smith-Lohr Coal Co. Pana Coal Co., No. 2 Assumption Coal & Mining Co.	- do. Pana Stonington Pana - do. - do	4 2 3	22 19 11 23 13 11 8	4 12 26 2 2 5 28	130	18
	Total		19	110	77	131	18

MACON COUNTY-

2 D 3 D 4 D	Ianufacturers & Consumers Coal Co. eeatur Coal Co., No. 2 eeatur Coal Co., Niantic eeatur Coal Co., No. 1 lue Mound Coal Mining Co.	do do do	1 1 1	15 12 12 5 3	24 24	
	Total		5	40	46	

MOULTRIE COUNTY-

1	Lovington Coal Co	Lovington	 1	 	2

RECAPITULATION BY COUNTIES.

rs.	irers.	Fimbermen.	Trackmen.	rappers.		Number not classified.	Total number all employés	Number of days in operation	Total tons produced.	hom
Winers 4,336	Shotfirers	fuil.	Trac.		6,175	700	6,875	170	5,076,961	Marin

FIFTH DISTRICT.

Miners.	Shotfirers.	Timbermen.	Trackmen.	Trappers.	Total classified.	Number not classified.	Total number all employés	Number of days in operation.	Total tons produced.
220 212 188 175 158 151 111	6 6	2 3 4 2 4 4 4 3	2 3 2 2 2 2 4 4 1	11 7 5 4 3 1 3	271 263 233 186 200 188 198 123	14 44 8 13 48 28 6 47	285 307 241 199 248 216 204 170	161 168 173 167 126 131 104 143	284,579 209,213 184,538 180,477 154,170 129,454 89,664 60,781

FIFTH DISTRICT.

169 2 2 3 200 31 231 231 239 2 1 1 1 130 11 141 2 339 2 1 1 1 50 9 53 31 31 339 31 1 1 1 2 33 30 1 1 33 8 93 31 1 33 30 1 33 1 33 30 1 33 33 1 33 33 1 33 33 1 33 33 1 33 33 1 33 33 1 33 33 1 33 33 1 33 33 1 33 33 1 33 33 1 33 33 33 1 33 33 1 33 33 1 33 33 1 33 33 33 1 33 33 33

FIFTH DISTRICT.

16	 19	15	34	92	5,520	1

Table 53—

SHELBY COUNTY-

					Class	sified Nu	mber of
Number.	Name of Operator.	Postoffice address or location of mine.	Cagers.	Drivers.	, Laborers.	Loaders.	Machinemen.
1 2	Century Coal Co Moweaqua C. M. & Mfg. Co Total	Tower Hill Moweaqua	. 6	13 7 20	10	14	4 4

VERMILION COUNTY-

1	1		1	1	1	
1 Bunsen Coal Co	Georgetown	3	20	37		
2 Brazil Block Coal Co	Steelton	2	19	15		
3 Bunsen Coal Co		3	24	36		
4 Brazil Block Coal Co			18	15		
5 Electric Coal Co			6			
6 Brazil Block Coal Co			25	15		
7 E. S. Gray Coal Co			6	20		
8 Tilton Coal Co			6			
9 Bunsen Coal Co			10	16		
O Danville Col. Co			5	2		
I Brazil Block Coal Co			8	10		
2 Bunsen Coal Co			6	22		
3 Bushong Bros			1	2		
4 South Oakwood Coal Co	Oakwood	. 1	2	5		
m						
Total		26	156	195		
	J i		I	1	l	

FIFTH DISTRICT-

					Clas	sified N	umber of
Number.	Name of Operator.	Number of mines.	Cagers.	Drivers.	Laborers.	Loaders.	Machinemen.
2 3 4	Christian Macon Moultrie Shelby Vermilion Total	5 1 2	19 5 6 26 	110 40 1 20 156	77 46 10 195 328	131	18 2 4

FIFTH DISTRICT.

Miners.	Shotfirers.	Timbermen.	Trackmen.	Trappers.	Total classified.	Number not classified.	Total number all employés	Number of days in operation	Total tons produced.
123 60	2	4 4	4 2	6 2	158 103	20 22	178 125	144 128	97,885 45,982
183	2	8	6	8	261	42	303	136	143,867

FIFTH DISTRICT.

301	4	8	5	9	387	73	460	242	505,519	1
300	4	17	4	6	367	60	427	180	302,898	2
249	4	6	4	7	333	42	375	126	201,039	3
325	4	15	6	. 7	392	58	450	121	183,907	4
220	4	6	6	5	249	28	277	227	170,241	5
410	4	16	8	5	485	65	550	71	125,527	6
80	2	2	2	2	116	11	127	201	74,855	7
66	2	2	1		78	6	84	253	64,863	8
69	2	4	2	2	107	59	166	77	57,825	9
48	2	3	1	1	63	8	71	223	44, 465	10
150	2	4	4	3	183	32	215	83	43,991	11
42	1	4	2		79	25	104	96	33,925	12
15	2	2	2		25	3	28	229	15,849	13
24	2	4	1	1	40	4	44	70	7,696	14
2,299	39	93	48	48	2,904	474	3,378	157	1,832,600	

RECAPITULATION BY COUNTIES.

Employ	ės in eac	h Occup	ation.							
Miners.	Shotfirers.	Timbermen.	Trackmen.	Trappers.	Total classified.	Number not classified.	Total number all employés	Number of days in operation	Total tons Produced.	Number.
$\begin{array}{c} 1,215\\ 377\\ 16\\ 183\\ 2,299 \end{array}$	12 4 2 39	26 6 S 93	20 6 48	34 6 8 48	1,662 490 19 261 2,904	208 62 15 42 474	1,870 552 34 303 3,378	147 168 92 136 157	1,292,876 265,530 5,520 143,867 1,832,600	1 2 3 4 5
4,090	57	133	80	96	5,336	801	6,137	153	3,540,393	

Table 53-

MACOUPIN COUNTY-

1		1						
		Classified Number of						
Name of Operator.	Postoffice address or location of mine.	Cagers.	Drivers.	Laborers.	Loaders.	Machinemen.		
1 Superior Coal Co. 2 Superior Coal Co. 3 Superior Coal Co. 3 Superior Coal Co. 4 Consolidated Coal Co. 5 Consolidated Coal Co. 6 Royal Col. Co. 7 Girard Col. Co. 9 Nadison Coal Corporation. 10 Consolidated Coal Co. 11 Carlinville Coal Co. 12 Lukiess & Andrews. 3 Glenridge Coal Co. 14 Consolidated Coal Co. 15 Consolidated Coal Co. 16 Consolidated Coal Co. 17 Nilwood Coal Co. 17 Nilwood Coal Co.	do d	4 5 10 10 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	36 30 39 32 32 30 20 23 15 13 9 8 10 14 14 11	12 3 18 13 60	306 289 258 194 172 124 99 40 33 111 63	90 90 90 57 56 36 12 30 8 16 36 24		
Total		59	339	108	1,689	545		

MONTGOMERY COUNTY -

2 Hillsboro Coal Co	Panama Hillsboro Witt	4	18 18 21	10 30	212 130	36 18
4 Kortkamp Coal Co	Hillsboro	6	16 14	4 2	121	18
6 Montgomery County Coal Co	Hillsboro	2	12 12	9	110	18
8 Peabody Coal Co	Nokomis	2 2	8 3	 5	44	24
10 Litchfield Coal Co	Litchfield	2	6	4		
Total		24	128	64	617	114

SIXTH DISTRICT-

					Classified Numb					
	Name of Operator.	Number of mines.	Cagers.	Drivers.	Laborers.	Loaders.	Machinemen.			
1 2	Macoupin - Montgomery - Total -	17 10 27	59 24 83	339 128 467	108 64 172	1,689 617 2,306	545 114 659			

SIXTH DISTRICT.

Employ	és in Eac	eh Oceup	oation.							
Miners.	Shotfirers,	Timbermen.	Trackmen.	Trappers.	Total classified.	Number not classified.	Total number all employés	Number of days in operation	Total tons produced.	Number.
300 254 150 75 52 123	4 4 4 6 6 4 2	10 8 12 3 2 6 4 4 5 4 6 6 3 3 2 4 4 4 4 6 6 4 4 4 4 6 6 6 7 8 1 8 1 8 1 8 1 8 1 8 1 8 1 8 1 8 1 8	22 24 19 13 12 2 3 9 6 2 2 2 2 4 2 3 1	18 15 23 15 10 5 7 11 6 7	487 460 446 324 294 365 296 222 202 163 97 85 257 73 177 107	80 85 105 81 61 35 18 48 22 70 17 45 32 20 64 30	567 545 551 405 335 400 314 270 224 233 114 130 289 93 241 137	210 212 240 196 184 191 205 173 148 135 187 259 64 130 12 13	693,029 671,484 545,278 423,287 374,898 372,674 257,500 189,996 65,938 52,440 50,965 41,272 14,317 6,358	1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17
962	24	77	130	132	4,065	813	4,878	150	4,029,606	

SIXTH DISTRICT.

52	4	8	12	9	362	71	433	222	429,270	
		8	4	2	214	14	228	202	245,780	
240		6	4	5	278	37	315	153	226,282	
		4	4	4	177	29	206	212	214,993	1
220		10	5	3	256	34	290	150	204,377	
		4	8	2	165	35	200	206	173,299	
145	2	8	6	6	180	37	217	154	125,164	
28		2	2	3	113	19	132	166	98,004	
42	4	3	2	2	63	10	73	173	51,424	
47	3	3	1	2	68	29	97	191	36,090	
774	13	56	48	38	1,876	315	2,191	183	1,804,683	

RECAPITULATION BY COUNTIES,

Miners.	Shot firers.	Timbermen.	Trackmen.	Trappers.	Total classified.	Number not classified.	Total number all employés	Number of days in operation	Total tons produced.	Number,
962 774	24 13	77 56	130 48	132 38	4,065 1,876	813 315	4,878 2,191	150 183	4,029,606 1,804,683 5,834,289	1 2
1,736	37	133	178	170	5,941	1,128	7,069	102	5,804,259	

Table 53—

BOND COUNTY-

_	I	1							
			Classified Number of						
Number.	Name of Operator.	Postoffice address or location of mine.	Cagers.	Drivers.	Laborers.	Loaders.	Machinemen.		
1	Pocahontas Mining Co	Pocahontas	2	7	2		8		
			×		CLINT	on cot	NTY-		
- 3	Southern Coal Mining Co Co-operative Coal & Mining Co Breese-Trenton Mining Co Breese-Trenton Mining Co.	Breese -do Beckemeyer	3 2 2 2 2 9	15 30 12 18 	6 10 6 10 32	212	58		
					MADIS	on cou	NTY-		
4 5 6 7 8 9 10 11 12 13 14	Mt. Olive & Staunton Coal Co. Lumaghi Coal Co. Donk Bros. Coal & Coke Co. Mt. Olive & Staunton Coal Co. Donk Bros. Coal & Coke Co. Donk Bros. Coal & Coke Co. Donk Bros. Coal & Coke Co. Madison Coal Corporation Madison Coal Corporation Lumaghi Coal Co.	Troy. Glen Carbondo. Cantine. Staunton. Worden. Edwardsville. Troy. Cantine. Edwardsville.	2 4 2 10 5 5 3 4 4 3 3 2 2 1 1 4 4 1 3 3 3 3 4 9	35 26 28 30 23 21 13 17 18 10 18 15 3 5	77 12 25 80 77 9 15 15 10 10 2 25 17 271	366 285 174 176 95 65 66 110 112 20 1 1,470	566 477 588 800 288 400 244 144 188 30 244 144 144 8		
					MARI	ON COU	JNTY-		
2 3 4 5 6	Centralia Coal Co Centralia Coal Co Marion County Coal Co Odin Coal Co Chicago-Sandoval Coal Co Centralia Coal Co Chicago-Sandoval Coal Co	-do	3 3 2 5 4 3 2	25 18 6 23 15 18 8	12 5 6 2 15	140	20 21 4		

Total....

Continued.

SEVENTH DISTRICT.

Employ	és in Eac	h Occur	ation.							
Miners.	Shotfirers.	Timbermen.	Trackmen.	Trappers.	Total classified.	Number not classified.	Total number all employés	Number of days in operation	Total tons produced.	Number,
100	2	4	2	3	130	19	149	186	103,537	1

SEVENTH DISTRICT.

250 170 170	4 5 4	6 4 4 4	8 6 4 6	8 5 6	316 306 208 220	51 11 10	367 317 208 230	187 223 212 163	294,137 282,626 224,894 199,278	1 2 3 4
590	13	18	24	19	1,050	72	1,122	196	1,000,935	

SEVENTH DISTRICT.

					-					
	l	2	30	6	504	63	567	199	613,962	١,
		2			504					1
		1	11	12	398	68	466	185	548,220	2
		12	8	10	317	45	362	211	390,461	3
224		26	12	5	467		467	166	373,900	4
		2	4	11	256	43	299	174	282.715	5
225	4	1	8	4	275	43	318	154	264,696	- 6
160	4	30	10	3	224	74	298	207	229, 431	7
15			3	6	194	40	234	161	195,218	8
56		6	4	7	203	47	250	160	187, 983	6
		4	4	6	126	21	147	215	185,307	10
124		1	6	3	314	52	366	224	163,795	- 11
		6	2	1	167	16	183	196	107,624	12
		3	ĩ		38	13	51	218	34,263	13
30	2	7	2		74	9	83	135	25,620	14
15		,	_ ~		15	2	17	267	21,229	15
					20					16
33		2	1		63	11	74	197	23,028	16
200		100	100		0.00	7.45	4.100	100	0.045.450	
882	10	103	106	77	3,635	547	4,182	192	3,647,452	

SEVENTH DISTRICT.

160 190 60	6 4 4 6 2	2 2 2 4	4 5 2 3 2 4	7 4 2 7 5 3 2	284 227 139 203 192 259 76	29 31 31 23 15 26 14	313 258 170 226 207 285 90	210 200 203 185 202 105 132	237,856 203,911 157,717 151,868 144,114 131,873 37,929	1 2 3 4 5 6 7
916	26	12	21	. 30	1,380	169	1,549	177	1.065,268	

Table 53—

SEVENTH DISTRICT-

_			Classified Number of						
Number.	Name of Operator.	Number of mines.	Cagers.	Drivers.	Laborers.	Loaders.	Machinemen.		
3	Bond Clinton Madison Marion Total	4 16	2 9 49 22 82	7 75 265 113 460	32 271 41 346	212 1,470 154 1,836	8 58 402 45 513		

RANDOLPH COUNTY-

			Classified Numb				
	Name of Operator.	Postoffice address or location of mine.	Cagers.	Drivers.	Laborers.	Loaders.	Machinemen.
2 3 4 5 6 7 8	Willis Coal & Mining Co Bessemer Washed Coal Co Moffat Coal Co Illinois Fuel Co Jones Bros. Coal & Mining Co Wilson Bros Bessemer Washed Coal Co Boyd Coal & Coke Co Randolph County Coal Mining Co West Mine Coal Co	Tilden Spartado Tilden Sparta Tilden Sparta Tilden Sparta Coultervilledo	3 2 1 1 2 2	10 9 10 10 4 6 6 4 4 4 4 4 4	8 1 6 5 6 2 21 2	72	34 10 66

ST. CLAIR COUNTY-

1 St. Louis & O'Fallon Coal Co	Casevville	4	26	35		82
2 Consolidated Coal Co	Collinsville	5	30	21	200	30
3 St. Louis & O'Fallon Coal Co			20	16		
4 Prairie Coal Co	Belleville	4	12	10		
5 Breese-Trenton Coal Co	Trenton	3	17	10	100	50
6 Jos. Taylor Coal Co	O'Fallon	4	10	16		
7 Royal Coal & Mining Co	Belleville	2	14	8		
8 Southern Coal & Mining Co	Shiloh	3	12	6	129	24
9 Bessemer Washed Coal Co	Marissa	3	9			
10 Superior Coal & Mining Co	Bellevîlle	2	10			
11 Suburban Coal & Mining Co	do	2	8	2		
12 Fullerton Coal Co	do	2	5	5		
13 Southern Coal & Mining Co	do	2	10	3	68	22
14 Jos. Taylor Coal Co			8	8		
15 Mulberry Hill Coal Co	Freeburg		5			
16 Jos. Taylor Coal Co	O'Fallon	2	10	6		
17 Kolb Coal Co	Mascoutah	2	8	6	2	
18 Consolidated Coal Co	Belleville	2	11	4	36	6

Continued.

RECAPITULATION BY COUNTIES.

Employés in each Occupation.										
Miners.	Shotfirers.	Timbermen.	Trackmen.	Trappers.	Total classified.	Number not classified.	Total number of employés	Number of days in operation	Total tons produced.	Number.
100 590 882 916	2 13 10 26	18 103 12	2 24 106 21	3 19 77 30	130 1,050 3,635 1,380	19 72 547 169	149 1,122 4,182 1,549	186 196 192 177	103,537 1,000,935 3,647,452 1,065,268	1 2 3 4
2,488	51	137	153	129	6,195	807	7,002	188	5,817,192	

EIGHTH DISTRICT.

Employ	és in Eac	eh Occup	ation.							
Miners.	Shotfirers.	Timbermen.	Trackmen.	Trappers.	Total classified.	Number not classified.	Total number of employés	Number of days in operation	Total tons produced.	Number.
105 70 55 63 55 51 48 35	2 2 2 2 2 2 2 2 4	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	6 3 3 4 1 2 2 2 2 1	5 1 2	54 125 127 103 69 74 69 82 61	14 17 9 10 5 6 8	68 · 142 136 113 74 80 77 82 61 48	208 155 190 182 180 192 127 174 196 175	227,047 126,970 97,567 79,656 69,594 68,015 54,265 40,918 39,899 28,397	1 2 3 4 5 6 7 8 9
482	14	4	26	8	807	74	881	178	831,428	

EIGHTH DISTRICT.

										-
260		4	12	6	429	63	492	179	531,298	1
		4	10	10	310	61	371	185	408,073	2
275	4	4	10	2	335	35	370	191	272,443	3
140	2		10	l	178	10	188	186	227,052	- 4
110		8	2	4	194	40	234	173	195,077	5
150	2	2	4	2	190	20	210	149	168,344	6
110	_		4	l	156	13	169	222	166,595	7-
****		3	6	3	186	24	210	141	157,566	- 8
120	2	ĭ	3	l	138	15	153	163	152,435	9
76	_	1 1	4		130	10	140	165	117,734	10
64	6		2	1	85	14	99	230	105,685	11
63	2		ĩ	2	80	9	89	204	89,699	12
00	2	2	1 1	2	115	17	132	124	78,175	13
75	2	_	3	2	100	15	115	143	77,991	14
50	8		i		64	7	71	152	76,232	15
90	0 2	2	3		115	13	128	115	74,696	16
58	5	-		1	82	1	83	304	70,421	17
99	9	2	3	1	64	10	74	182	69,520	18
******		1 2	1 0		0.1	10 1	1.3.1	102	05,020	, 10

Table 53—

ST. CLAIR COUNTY-

					Class	sified Nu	ımber o
Number.	Name of Operator.	Postoffice address or location of mine.	Cagers.	Drivers.	Laborers.	Loaders.	Machinemen.
$\begin{array}{c} 30\\ 31\\ 32\\ 33\\ 34\\ 35\\ 36\\ 37\\ 38\\ 39\\ 40\\ 41\\ 42\\ 43\\ 44\\ 45\\ 46\\ 47\\ 48\\ 49\\ 50\\ 51\\ 52\\ 53\\ 54\\ \end{array}$	Johnson Coal Co Borders Coal Co Witharmile International Coal & Mining Co Avery Coal & Mining Co Avery Coal & Mining Co Central Independent Coal Mining Co White & Son Dewey Coal Co Sunlight Coal Co Sunlight Coal Co Sunlight Coal Co Southern Coal & Mining Co L Senior Southern Coal & Mining Co Southern Coal & Mining Co Missouri & Illinois Coal Co Southern Coal & Mining Co Highland Coal Co Southern Coal & Mining Co Bessemer Washed Coal Co Highland Coal Co Southern Coal & Mining Co Missouri & Illinois Coal Co Highland Coal Co Southern Coal & Mining Co Missouri & Illinois Coal Co Hormony Coal Co Co Hormony Coal Co Harmony Coal Co Kolb Coal Co Kolb Coal Co Southern Coal & Mining Co Glendale Coal & Mining Co Glendale Coal & Mining Co T. M. Weeks Coal Co	New Athens Rentchler .do	1 2 2 2 1 1 1 1 1 2 2 1 1 1 2 2 2 1 1 1 1 2 2 2 1 1 1 1 1 2 2 2 1 1 1 1 1 2 2 2 1	4 9 6 4 2 4 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5	5 5 2 2 10 2 2 2 3 5 5 3 6 6 3 2 5 5 2 1 1 2 2 1 1 2 2 6 6 2 1 3 3 3 3 3 4 2 2 2 3 3 3 4 2 2 2 3 3 3 4 2 2 2 3 3 3 3 4 2 2 2 3 3 3 3 4 2 2 2 3 3 3 3 4 2 2 2 3 3 3 3 4 2 2 2 3 3 3 4 2 2 2 3 3 3 4 2 2 2 3 3 3 4 2 2 2 3 3 3 4 2 2 2 3 3 3 4 2 2 2 3 3 3 4 2 2 2 3 3 3 4 2 2 2 3 3 3 4 2 2 2 3 3 3 4 2 2 2 3 3 3 4 2 2 2 3 3 3 4 2 2 2 3 3 3 4 2 2 2 3 3 3 4 2 2 2 3 3 3 4 2 2 2 3 3 3 3 4 2 2 2 3 3 3 4 2 2 2 3 3 3 3 4 2 2 2 3	29 29 1 1 1 1 18 39 9 30 42 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	6 6 6 166
	Total		92	3.41	256	697	318

EIGHTH DISTRICT-

			Classified Number of						
Number.	Name of Operator.	Number of mines.	Cagers.	Drivers.	Laborers.	Loaders.	Machinemen.		
1 2	RandolphSt. Clair	10 55	17 92	67 381	51 256	72 697	66 318		
	Total	65	109	448	307	769	384		

Continued.

SEVENTH DISTRICT-Concluded.

Employ	és in Ea	ch Occuj	pation.							
Miners.	Shotfirers.	Timbermen.	Trackmen.	Trappers.	Total classified.	Number not classified.	Total number of employés	Number of days in operation	Total tons produced.	Number.
50 80 45 52 42 30 36 66 66 66 45 45 45 45 45 45 45 45 45 45 45 46 25 27 45 22 27 45 21 22 22 22 22 42 42 42 42 42 42 42 42 42	2 2 2 4 4 5 5 5 5 2 2 2 4 4 5 2 2 2 2 2	1 2 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	2 1 1 2 2 1 1 1 2 2 2 2 1 1 1 1 1 1 1 1	1 2 2 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	644 95 655 655 59 54 4451 51 556 557 566 558 81 29 300 366 559 227 22 72 344 166 166 17 107 107 107 107 107 107 107 107 107	8 18 18 1 8 6 6 6 6 7 7 7 8 7 8 7 7 8	72 113 666 73 50 60 63 53 53 53 64 61 88 83 33 66 75 52 22 22 22 30 117 45 41 111 37 65 43 15	178 175 203 130 2446 186 177 140 145 147 145 160 175 162 90 177 6	68, 352 62, 230 54, 023 54, 023 54, 023 46, 474 40, 591 40, 599 40, 050 31, 060 31, 060 31, 060 32, 461 24, 454 22, 462 22, 461 24, 454 24, 454 24, 454 21, 45	19 20 21 22 23 24 25 26 27 28 30 31 33 33 34 43 45 46 47 48 49 50 51 52 53 54 55
2,669	107	48	113	44	4,725	569	5,294	144	4,060,898	

RECAPITULATION BY COUNTIES.

Employ	Employés in each Occupation.									
Miners.	Shotfirers.	Timbermen.	Trackmen.	Trappers.	Total classified.	Number not classified.	Total number of employés	Number of days in operation	Total tons	Number.
$^{482}_{2,669}$	14 107	4 48	26 113	8 44	807 4,725	74 569	881 5,294	178 144	831, 428 4, 060, 898	1 2 .
3,151	121	52	139	52	5.532	643	6,175	151	4,892,326	

Table 53-

FRANKLIN COUNTY-

					Clas	sified Nu	mber of
Number.	Name of Operator.	Postoffice address or location of mine.	Cagers.	Drivers.	Laborers.	Loaders.	Machinemen.
4 5 6 7 8	United Coal Mining Co Benton Coal Co Zeigler District Colliery Co Franklin County Colliery Co Brazil Block Coal Co Hart-Williams Coal Co W. P. Rend Collieries Co Big Muddy Carterville Mining Co Carroll & Franklin Counties Coal Co So. Illinois Coal & Coke Co	Christopher Benton . Christopher Sesser . W. Frankfort Benton . Rend . Royalton . Hanaford . Herrin .	2 4 2 2 5 3 4 1 1 1 1	18 20 23 16 24 14 12 8 3 1	12 18 16 59 16 5 5 5	240 178 120 200 18 112 30	36 26 22 56 11 34 25 4 6
				(GALLA'	rin cot	UNTY
112	Gallatin Coal & Coke Co Hickory Hill Coal Co	Equality	2	10 4	4 1		
	Total		2	14	5		
				JE	FFERS	on cou	JNTY-
1	T. G. Watts	Mt. Vernon	1	4	4		
_					PER	RY COI	JNTY-
56 77 8 9 10 11 12 13 14 15 16	Paradise Coal Co. Duquoin Oper. Co. Bessemer Washed Coal Co Missouri & Illinois Coal Co Willis Coal & Mining Co. Bald Eagle Mining Co. Brilliant Coal & Coke Co.	Willisvilledo Winkle Duquoin Cutler Coulter ville Tamaroa Sunfield do Duquoin do		16 15 11 11 17 10 6 7 7 7 5 4 4 4 2 1	8 18 11 11 10 5 5 5 1 1 1 1 3	90 112 85 	6 16 26 20 20

25 108 72

70 379

Continued.

NINTH DISTRICT.

Shotfirers.	Timbermen.	Trackmen.	Trappers.	Total classified.	Number not classified.	Total number of	Number of days in operation	Total tons	
02	Ē	Tra	Trap			employés	operation		
4 6 5 4 6 4 4 2	2 22 1 2 6 4 6 2 2 2 4	14 23 13 6 7 8 4 2 2	3 10 6 4 14 4 3 5	349 341 269 306 302 259 186 78 77	53 50 57 25 119 51 37 10 23 8	402 391 326 331 421 310 223 88 100 38	200 192 195 204 193 151 200 146 183 168	374,272 332,127 301,269 294,148 255,805 232,777 181,079 57,238 27,609 14,819	
35	51	81	49	2,197	433	2,630	183	2,071,143	
ISTR	ICT.								
2		3 1		85 25	16	101 25	184 152	52,407 16,608	
2		4		126	16	126	168	69,115	
	6 5 4 6 6 4 4 2 2 35 ISTR	6 22 5 1 4 2 6 6 6 4 4 4 4 6 2 2 2 4 35 51	6 22 23 5 1 13 4 2 6 6 6 6 7 4 4 8 4 6 4 2 2 2 2 2 3 35 51 S1 ISTRICT.	6 22 23 10 5 1 13 6 4 2 6 4 6 6 6 7 14 4 4 8 4 4 6 6 4 3 2 2 2 2 5 4 2 35 51 81 49 ISTRICT.	6 22 23 10 341 5 1 13 6 269 4 2 6 4 306 6 6 6 7 14 302 4 4 4 8 4 259 4 6 4 3 186 2 2 2 2 5 77 4 2 30 35 51 81 49 2,197 ISTRICT. 3 85 2 3 85 2 3 85	6 22 23 10 341 50 5 1 13 6 269 57 4 2 6 4 306 25 6 6 6 7 14 302 119 4 4 8 4 259 51 4 6 6 4 3 186 37 2 2 2 2 5 78 10 2 2 2 77 72 4 2 30 8 35 51 81 49 2,197 433 ISTRICT.	6 22 23 10 341 50 391 55 391 55 1 13 6 269 57 336 4 2 6 4 306 25 331 6 6 6 6 7 14 302 119 421 4 4 8 4 259 51 332 2 2 2 5 78 10 88 2 2 2 2 5 78 10 88 35 35 51 81 49 2,197 433 2,630 STRICT.	6 22 23 10 341 50 391 192 5 1 1 13 6 269 57 326 195 6 6 6 7 14 306 25 331 204 6 6 6 7 14 302 119 421 193 4 4 8 4 250 51 337 223 200 2 2 2 5 78 10 88 10 88 146 2 2 2 2 2 5 78 10 88 146 35 5 1 81 49 2,197 433 2,630 183 168 35 51 81 49 2,197 433 2,630 183	6 22 23 10 341 50 391 192 332,127 5 1 13 6 269 57 366 195 4 2 6 4 306 25 331 204 224,148 6 6 6 7 14 302 119 421 193 255,805 4 4 8 4 259 51 310 151 232,777 4 6 6 4 3 186 37 223 200 181,079 2 2 2 2 5 78 10 88 146 57,288 2 2 2 77 23 100 183 27,690 4 2 30 8 38 168 14,819 35 51 81 49 2,197 433 2,630 183 2,071,143 ISTRICT.

NINTH DISTRICT.

							40.8		000 010	,
328	6				334	71	405	144	266,810	1
136	4	4	4	4	254	23	277	135	220,449	2
150					150	60	210	155	155,934	3
160	4	2	4	1	196	22	218	181	148,505	4
			4	4	144	12	156	205	144,610	5
			6	3	170	22	192	138	119,479	- 6
105	2	2	4	1	238	24	262	155	74,480	7
100	3		1	3	120	16	136	139	62,692	- 8
65	4		3	2	89	10	99	176	54,096	9
75			1	1	90	10	100	134	49,040	10
60	4		2	2	78	8	86	71	26,517	11
30	2		1		39	5	44	117	16,220	12
36	4		1		48	5	53	161	12,193	13
40	2		1		50	5	55	270	9,618	14
12			1		16	4	20	219	8,856	15
			1		17	4	21	100	6,603	16
6					8		8	158	5,708	17
	2				16	3	19	150	3,000	18
1,303	37	8	34	21	2,057	304	2,361	145	1,384,810	
,										

Table 53—

SALINE COUNTY-

					Clas	sified Nu	mber of
Number.	Name of Operator.	Postoffice address or location of mine.	Cagers.	Drivers.	Laborers.	Loaders.	Machinemen.
4 5 6 7 8 9 10 11 12 13 14 15 16	O'Gara Coal Co. Saline County Coal Co. O'Gara Coal Co. Wasson Coal Co. Wasson Coal Co. O'Gara Coal Co. D'Gara Coal Co. D'Gara Coal Co. D'Gara Coal Co. Davenport Mining Co.	Harrisburgdo Eldorado Harrisburg Ledford Harrisburg Ledford Eldorado Carrier Mills Eldorado Carrier Mills Harrisburg Harrisburg	6 5 6 6 3 4 4 4 4 3 3 3 2 2 4 4 4 4 4 3 3 1 1 1 61	34 23 33 27 7 18 31 23 15 17 6 23 22 21 12 21 17 4 2	27 10 15 15 4	301 179 283 221 160 148 189 93 120 92 104 65	366 266 344 244 32 366 222 167 15 122 177 144 141
_					WHI	TE COU	NTY-

1 Norris City Coal Co	Norris City	1	2	2	 5

NINTH DISTRICT-

	`		Classified Number of						
Number.	Name of Operator.	Number of mines.	Cagers.	Drivers.	Laborers.	Loaders.	Machinemen.		
2 3 4	Franklin Gallatin Jefferson. Perry Saline. White.	2 1 18 17	25 2 1 25 61 1	139 14 4 108 328 2 595	131 5 4 70 58 2 270	379 2,053 3,330	72 302 5 599		

Continued.

NINTH DISTRICT.

mploy	ės in Eac	h Occup	ation.							
Miners.	Shotfirers.	Timbermen.	Trackmen.	Trappers.	Total classified.	Number not classified	Total number of employés	Number of days in operation	Total tons produced.	Vermber
		5	4	6	392	88	480	194	432,566	
		4	11	4	279	43	322	224	423,257	
		. 2	6	8	372	105	477	209	401,657	
		4	5	7	291	68	359	181	285,015	
		6	S	4	232	69	301	202	254,686	
28	2	4	4	5	262	65	327	188	247,575	
		2 1	7 3	5	252	76	328	193	220,181	
115	3	1	3	1	151		151	212	190,723	
	2 2	2	4 3	4	156	25	181	220	132,067	1
76	2	1	3	1	99	11	110	216	98,670	
		2	6	10	158	39	197	133	96,402	
15	2	2 3 3	6 3 3	5 3	186	38	224	115	82.550	
		3		3	134	55	189	106	69,579	
		2	6	3 2	154	54	198	63	53,529	
10 30		2	3	2	116	12	138	103	41,578	
30	2	1	1.		39	9	48	132	22,924	1
32	2	1			40	11	51	25	2,106	
306	15	45	77	68	3,313	768	4,081	159	3,055,065	

NINTH DISTRICT.

24	2	1	1	 38	8	46	203	23,780	1

RECAPITULATION BY COUNTIES.

Employ	és in eacl	h Occupa	tion.							
Miners.	Shotfirers.	Timbermen.	Trackmen.	Trappers.	Total classified,	Number not classifièd.	Total number of employés	Number of days in operation	Total tons produced.	Number.
568 83 20 1,303 306 24 2,304	35 2 37 15 2 91	51 S 45 1	81 4 1 34 77 1	21 68	2,197 110 30 2,057 3,313 38 7,745	433 16 5 304 768 8	2,630 126 35 2,361 4,081 46 9,279	183 168 151 145 159 203	2,071,143 69,115 8,485 1,384,810 3,055,065 23,780 	1 2 3 4 5 6

Table 53-

JACKSON COUNTY-

					Clas	sified Nu	mber o
Number.	Name of Operator.	Postoffice address or location of mine.	Cagers.	Drivers.	Laborers.	Loaders.	Machinemen.
1 2	Muddy Valley Mining & Mfg. Co Big Muddy Coal & Iron Co	Hallidayboro Murphysboro	6	22	50	120	
5 6 7	Big Muddy Coal & Tron Co Big Muddy Coal & Tron Co Gartside Coal Co Gus Blair Big M. Coal Co Gartside Coal Co Schmidtgall Coal Co Chicago-Carbondale Coal Co	-do -do -do Carbondale	1 2 1	10 5 8 2 5	5 2	28 45 25 18	10 1 10 6
9	Peacock Coal Co	DeSoto		2 2	2 2	18	8
	Total		14	56	61	254	35

WILLIAMSON COUNTY-

1	Big Muddy Coal & Iron Co	Clifford	4	6	20	120	74
3	Johnston Čity Coal Co Peabody Coal Co	Johnston City	3	32	33	80	10
	Sunnyside Coal Co	Marion	4 3	6	10 10	20	10 20
4	Chicago-Carterville Coal Co	nerrin		4 6	10	208	62
0	Big Muddy Coal & Iron Co	00	4 4	6	15	208	
7	Madison Coal Composition	Combai	4	21	20		
6	Madison Coal Corporation Carterville District Coal Co	Cambria		16	3		16
0	Chicago & Big Muddy Coal & Iron Co.	Marion	2	13	0		10
10	Contempille Cool Co	do	4				
10	Carterville Coal Co&	Cartervine	4 3	20	0		
11	Western Coal & Mining Co	Bush		14	16		
12	Williamson County Coal Co	Johnston City	4	. 21	2		
13	Chicago-Carterville Coal Co	Herrin	2 5	4			
14	St. Louis-Carterville Coal Co		5	18	2		
15	Hafer Washed Coal Co	Carterville	1	16	4		
10	Madison Coal Corporation	Dewmaine	4	18	20	6	2
17	Southern Illinois Coal & Coke Co Peabody Coal Co	Herrin	4 2 2	. 4	8		
18	Peabody Coal Co	Marion	2	4	8	40	10
19	Southern Illinois Coal & Coke Co	Herrin	2	2	6	40	12
20	W. P. Rend Coal & Coke Co	do	4	8	2	85	16
21	Carterville & Big Muddy Coal Co	Cambria	1	9	2		
22	Carterville & Herrin Coal Co	Herrin	2	11	4		
23	West Virginia Coal Co	Marion	3	8		95	10
24		Carterville	2	10	10		
25	Robt. Dick Coal Co	Cambria	3	12			
26	Taylor Coal Co	Herrin	1	15	4		
27	Watson Coal Co	do	2	8	8		
28	Taylor Coal Co	do	2	12	6		
29	Standard Col. Co	White Ash	2	15		34	10
30	Chicago-Herrin Coal Co	Herrin	2	6	3		
31	Pond Creek Coal Co	ldo			28		
32	Standard Col. Co	Johnston City	1	3			
33	Big Muddy Fuel Co	do	2	11	23		
34	Watson Coal Co	Herrin	2	8	4		
35	Scranton Big Muddy Coal Mining Co	Marion	2	3	2		
36	Keystone Big Muddy Coal Co	do	1	2	3		
37	Pittsburg Big Muddy Coal Co	Herrin	2	2	2		
38	Spillertown Coal & Coke Co	Marion			1		
	Total		95	374	295	730	242
			00				

Continued.

TENTH DISTRICT.

Miners.	Shotfirers.	Timbermen.	Trackmen.	Trappers.	Total classified.	Number not classified.	Total number of employés	Number of days in operation	Total tons produced.	Vumber
35 140 139 6 14 4 59 8	4	2 4 1 2 1	2 2 2 1 1 2	3 1 2 1	253 140 139 70 72 54 30 67 12	47 91 88 20 16 12 5 8	300 231 227 90 88 66 35 75 12	152 151 119 210 181 111 186 143 177 176	175,661 163,677 103,376 57,598 56,540 24,887 16,729 15,478 15,248 14,253	1 2 3 4 5 6 7 8 8

TENTH DISTRICT.

				_		!				1
		4	6	5	239	160	399	223	492,754	
400	4	5	8	8	493	39	532	208	405,559	
160	4	4	4	4	286	74	360	181	387,248	
271	2	2	2	2	336	91	427	205	379,542	
21	4	4	4	4	327	131	458	194	375, 299	
220	4	6	6	8	269	103	372	186	329,691	
240	6	4	6	8	309	36	345	174	267,145	
137		4 3	4	6	188	43	231	176	248,349	
175	4	3	6	4	209	55	264	169	232,923	
200	4	2	- 8	6	250	36	286	181	216,645	
145	4	5	6	6	199	41	240	199	185,800	
170	4	6	5	6	218	20	238	172	174,974	
165	2	2	2	2	279	56	235	171	171,903	
155	4	2 2	2 3	10	199	54	253	144	159,599	
125	4	4	5	2	161	25	186	144	158,620	
225	6	2	6	10	299	35	334	118	151,890	
85	4	1	1	4	109	3	112	160	131,346	
40	4	4	3	4	119	88	207	144	129,212	
40	î	î	1	2	107	71	178	158	120, 414	
30	l	2	4	4	155		155	178	120,414 117,773	
131	4	2 2	4	3	156	20	176	160	117,722	
78	2	ĩ		2	102	16	118	182	99,816	
, ,	l .	2	2 2 2	l	120	6	126	165	97,610	
92	2		2	4	122	2	126	146	86,401	
100	2	1	2	3	123	21	144	128	75,535	
120	4	î	4	2	151	5	156	95	70,245	
50	4	2		4	80	12	92	168	68,000	
132	4	ĩ	2 3	4 3 3	163	7	170	75	62,746	
8	2	2	2	3	78	16	94	104	57,652	
64	6	2	2	2	87	23	110	128	56,568	
55		-	2		83	14	97	134	45,993	
35	2	1	1	2	45	5	50	176	40,512	
85	2	2		2	130	11	141	80	37,864	
50	6	2	3	2	77	12	89	168	37,000	
40	2	1	2	2	52	14	66	146	30,874	
	2	3	2		52 59	10	69	105	00,814	
45	2		2	1	29	2	31	20	28,742	
16	1	2	1	1	13	2	13	30	6,000	
9	1	1	1		13		13	30	2,447	
4,114	112	91	131	139	6,323	1,357	7,680	151	5,858,413	1

Table 53-

TENTH DISTRICT-

-	·		Classified Numbe					
Number.	Name of Operator.	Number of mines.	Cagers.	Drivers.	Laborers.	Loaders.	Machinemen.	
1 2	Jackson Williamson Total	10 38 48	14 95 109	374 430	61 295 356	254 730 984	35 242 277	

Table 54 is a recapitulation of Table 53, arranged by districts, and of employés at these mines is 71,520; of these, 36,533, or 51.08 per cent, this year from last, while there was an increase in the number of were classed as miners in last year's report, or a large per cent of them heads.

Table 54—Recapitulation of the Number of Persons Employed in the Number Employed, Average Days of Working

	Number	Classification of							
Districts.	of Mines.	Cagers.	Drivers.	Laborers.	Loaders.	Machine men.			
First	29	69	467	132	19				
Second	37	65	587	434	292	48			
Third	46	64	349	146	59	24			
Fourth	31	83	541	180	469	90			
Fifth	. 30	56	327	. 328	145	24			
Sixth	27	83	467	172	2,306	659			
Seventh	28	82	460	346	1,836	513			
Eighth	65	109	448	307	769	384			
Ninth	49	115	595	270	3,330	599			
Tenth	48	109	430	356	984	277			
Total	390	835	4,671	2,671	10,209	2,618			

Concluded.

RECAPITULATION BY COUNTIES.

Employés in each Occupation.										
Miners.	Shotfirers.	Timbermen.	Trackmen.	Trappers.	Total classified.	Number not classified.	Total number all employés	Number of days in operation	Total tons produced.	Number.
405 4,114	4 112	11 91	15 131	15 139	870 6,323	295 1,357	1,165 7,680	161 151	646,447 5,858,418	1 2
4,519	116	102	146	154	7,193	1,652	8,845	152	6,504,865	

gives the classification of employés by occupations. The total number are classified as miners. There is shown to be a large decrease in miners employés. This is probably due to the fact that machine men and loaders were, while in this year's report they are classified under their separate

Different Occupations in the Shipping Mines of the State, the Total Time and Total Tons Produced—1910.

Employ	és by Oc	cupations.				Number	Total	Average	Total ton
Miners.	Shot- firers.	Timber- men.	Track- men.	Trappers.	Total.	not classified.	number of employés	number of days in operation	Total ton: produced
5,169	2	110	135	65	6,158	928	7,086	195	2,818,5
5,428	49	104	87	165	7,259	805	8,064	181	3,555,0
3,312	61	74	64	85	4,238	750	4,988	187	2,573,3
4,336	103	114	130	129	6,175	700	6,875	170	5,076,9
4,090	57	133	80	96	5,336	801	6,137	153	3,540,3
1,736	37	133	178	170	5,941	1,128	7,069	162	5,834,2
2,488	51	137	153	129	6,195	807	7,002	188	5,817,1
3,151	121	52	139	. 52	5,532	643	6,175	151	4,892,3
2,304	91	105	198	138	7,745	1,534	9,279	160	6,612,3
4,519	116	102	146	154	7,193	1,652	8,845	152	6,504,8
36,533	688	1,064	1,310	1,183	61,782	9,738	71,520	167	47,225,2

PRICES PAID FOR MINING.

Table 55 presents, by districts, the prices paid for both hand and machine mining during the past year. Mining by hand is divided in two classes: shipping and local mines. In these shipping mines the average price per ton is 59.7 cents, while in the local mines it is 75.6 cents. Machine mining for the year shows that in the class of mines coal is produced at an average cost of 46.2 cents per ton.

Table 55—Average Price Paid for Mining by Hand and by Machine, at Shipping and Local Mines, by Districts—1909.

		Mining b	y Hand.		Machine	Mining.
Districts.	Shipping	Mines.	Local M	ines.		
Districts.	Tons.	Average price per ton.	Tons.	Average price per ton.	Tons.	Average price per ton.
First	2,818,570	.824	199,676	.792		
Second	3,350,877	.709	325,758	.899	204, 130	.55
Third	2,449,217	.688	242,674	.74	124,088	.525
Fourth	4,359,790	.557	133,701	.834	717,171	.517
Fifth	3,347,830	.576	236,375	.708	192,563	.48
Sixth	1,506,120	.555	28,219	.867	4,328,169	.48
Seventh	2,196,535	,536	96,530	.622	3,620,657	.476
Eighth	2,750,114	.555	139,198	.571	2,142,212	.482
Ninth	1,937,967	,509	20,368	.657	4,674,331	.433
Tenth	4,331,927	.483	70,153	.564	2,172,933	.418
The State	29,048,947	0.597	1,492,652	0.756	18,176,254	0,462

Table 56 presents, for a series of ten years, the total tons mined by hand and by machine at shipping mines, with the average prices paid for mining by each method.

Table 56—Total Tonnage and Average Prices Paid for Hand and Machine Mining at Shipping Mines for a Series of Ten Years—1901-1910.

	Hand M	ining.	Machine Mining.		
Years.	Tons.	Price per ton.	Tons.	Price per ton.	
1901	20,172,779	\$0.564	5.774,639	\$0.412	
1902	22,186,812	0.564	6,647,086	0.398	
1903	26,042,014	0.57	7,646,777	0.434	
1904	28,648,682	0.593	7,130,835	0.466	
1905	27,762,968	0.578	8,193,575	0.443	
1906	27,566,480	0.57	9,563,230	0.442	
1907	31,854,488	0,592	14,490,454	0.479	
1908	32,604,716	0.593	15,210,403	0,467	
1909	31,556,456	0.593	16,407,692	0.46	
1910	29,048,947	0.597	18,176,254	0.462	

EARNINGS OF MINERS.

Table 57 presents the earnings of miners at shipping mines where coal is mined exclusively by hand. In computing these earnings, the number of miners only are considered, the days worked, the tons mined and the average price paid per ton. The showing is by districts, and for a series of ten years.

Table 57—Earnings of Coal Miners, Hand Mining Exclusively, in Shipping Mines for the Year Ending June 30, 1910, by Districts.

Districts.	Number of mines.	Averagedays worked	Total tons mined by hand.	Average rate per ton.	Gross earnings.	Average tons per man per year.	Averageearnings per man per year.	Average tons per man per day.	Average earning per man per day.
First	5,169	197	2,818,570	\$0.824	\$2,323,065	545.28	\$449.42	2.77	§2.28
Second	5,179	181	3,182,748	0.714	2,271,215	614.55	438.54	3.40	2.42
Third	3,127	185	2,348,793	0.658	1,545,927	751,13	494.38	4.06	2.67
Fourth	4,336	175	4,353,890	0.557	2,425,116	1,004.13	559.30	5.74	3.20
Fifth	4,014	155	3,308,414	0.576	1,906,896	824.22	475.06	5.32	3.06
Sixth	1,383	170	1,393,389	0.556	774,625	1,007.51	560.10	5.93	3.29
Seventh	1,684	192	1,894,612	0.537	1,017,084	1,125.07	603.97	5.86	3.15
Eighth	2,630	147	2,609,833	0.555	1,448,457	992.23	550.74	6.75	3.75
Ninth	1,395	144	1,169,680	0.518	605,658	838.48	434.16	5.82	3.02
Tenth	3,144	147	3,401,448	0.482	1,638,887	1,081.89	521.27	7.36	3.55
' The State	32,061	168	26,481,377	\$0.603	\$15,956,930	825.97	\$497.71	4.92	\$2.96
1909	33,053	180	27,996,351	\$0,603	\$16,878,75	847.00	\$510.66	4.71	\$2.84
1908	32,606	188.	29,538,900	0.604	17,834,410	906,00	546.97	4.82	2.91
1907	22,186	209.	30,796,283	0.592	18,231,400	927.99	549.39	4.44	2.63
1906	30,742	189.6	25,628,945	0.5702	14,767,15	833,68	480,86	4.40	2.54
1905	31,185	198.5	26, 566, 481	0.5782	15,353,03	851.90	492.32	4.29	2.48
1904	28,717	213.3	27,091,501	0.5989	16,233,86	943.39	565.30	4.42	2.65
1903	25,878	224.1	24, 455, 225	0.5699	14,043,28	944.6	542.67	4.22	2.42
1902	24, 229	209.8	20,616,155	0.5645	11,638,12	850.88	480.34	4.06	2.29
1901	22,206	203.	18,227,130	0.5690	10,372,67	821.00	467.11	4.04	2.30

MACHINE MINING.

Table 58 shows by districts, the performance of machines in cutting coal in the mines of the State for the past year. In mines where machines are employed exclusively, the number of men are given; in mines where machines are only partly in use the number of men cannot be designated. The number of mines where machines are used exclusively, has increased by six this year over last while the men employed have increased by 2.196. The machines having increased by 68. The tons cut this year in this class of mines has increased 1,836,958 tons or 14.72 per cent over last year. In mines where machines are only partly employed in mining coal, the number of mines increased one this year over last, while the number of machines decreased twenty-five and tons cut decreased by 68,396 tons. The total record for machine mining for the year is shown in the last three columns of the table, compared with the previous year, the number of mines using machines increased by seven; the number of machines forty-three; and the tons of coal cut 1.768,562 or 9.7 per cent.

Table 58—Machine Mining—Mines, Men, Machines, Tons, by Districts.

	Mines in Which Machines are Used-											
Tu	Exclusively.					In Part.			Total.			
Districts.	Mines.	Men.	Machines.	Tons.	Mines.	Machines.	Tons.	Mines.	Machines.	Tons.		
Second					4	21	204,130	4	21	204.130		
Third	1	35	2	4,600	4	12	120,088	5	14	124,088		
Fourth	1	451	13	382,540	1	1)	334,631	2	24	717,171		
Fifth	2	233	7	185,997	1	2	6,566	3	9	192,563		
Sixth	14	4,255	284	3,862,661	3	35	465,508	17	319	4,328,169		
Seventh	11	3,620	168	3,269,706	5	38	350,951	16	206	3,620,657		
Eighth	12	1,590	122	1,257,826	5	66	884,386	17	188	2,142,212		
Ninth	11	2,728	134	2,208,227	18	151	2,466,104	29	285	4.674,331		
Tenth	9	1,542	109	1,303,514	12	114	869,419	21	223	2,172,933		
The State	61	14,454	839	12,474,471	53	450	5,701,783	114	1,289	18,176,254		

Table 59 shows the record of machine mining in the State for the past eleven years.

Table 59—Machine Mining—Mines, Men, Machines, Tons, for Eleven Years.

				Mines in W	hịch M	fachin	es are Used	i—		
	Exclusively.				In Part.			Total.		
Year.	Mines.	Men.	Machines.	Tons.	Mines.	Machines.	Tons.	Mines.	Machines.	Tons.
1900	38	3,883	272	3,765,601	29	158	1,817,993	67	430	5,583,594
1901	29	3,499	280	3,761,270	34	184	2,015,369	63	464	5,774,639
1902	34	4,811	308	4,460,025	30	156	2,037,098	64	464	6,497,123
1903	33	4,378	292	4,393,052	35	230	3,253,725	68	522	7,646,777
1904	40	3,691	400	4,903,184	27	223	2,237,243	67	623	7,140,427
1905	52	4,635	560	6,406,571	24	224	1,795,495	76	784	8,202,066
1906	57	6,137	685	7,638,536	28	277	1,924,694	85	962	9,563,230
1907	60	6,858	748	10,434,573	41	357	4,055,881	101	1,105	14,490,454
1908	60	12,357	754	11,246,285	45	406	3,964,138	105	1,160	15,210,423
1909	55	12,258	771	10,637,513	52	475	5,770,179	107	1,246	16,407,692
1910	61	14,454	839	12,474,471	53	450	5,701,783	114	1,289	18,176,254

Table 60 gives the names and number of machines in use and the districts wherein employed. The mines in the sixth, seventh, eighth, ninth and tenth districts employed 1,221 or 94.7 per cent of all the machines in use during the year. The first district was the only one not reporting any machines in use this year.

Table 60—Name and Number of Mining Machines in Use by Districts—1910.

Districts.	Sullivan.	Morgan-Gard- ner.	Ingersoll-Ser- geant.	Harrison.	Goodman.	Jeffrey.	Ingersoll Rand.	Herzler & Henninger.	Link Belt.	Yock.	Lee.	Total.
Second		16				5						21
Third	1	5				6					2	14
Fourth		12			10	2						24
Fifth		2		2	5				 			9
Sixth	111	14	76	78	23	6			11			319
Seventh	121		26	1	33	17	8					206
Eighth	103	1	15	30	11	5		17		6		188
Ninth	40	166	11	11	36	20	1					285
Tenth	131	7	29	27	6	13	10					223
The State	507	223	157	149	124	74	19	17	11	6	2	1,289

Table 61 gives the names and number of machines in use for the past eleven years.

Table 61—Name and Number of Mining Machines in Use for Eleven Years.

Year.	Sullivan.	Ingersol-Ser- geant.	Harrison.	Goodman.	Morgan-Gard- ner.	Jeffrey.	Ingersoll Rand.	Herzler & Henninger.	Yock,	Link Belt.	Lee.	Butler.	Electric.	Belleville.	Total.
1900	40	119	197		19	30		1	5	19					430
1901	33	132	178		32	33		13	24	19					464
1902	36	133	160	32	22	31		20	28			2			464
1903	82	95	178	15	15	50		33	31	21		2			522
1904	131	142	210	29	27	29		22	27	4		2			623
1905	183	178	236	49	19	41		40	33	4		1			784
1906	315	197	244	82	28	33		35	25		3				962
1907	427	221	195	112	74	35		26	8	4	3				1,105
1908	476	196	181	127	112	34		23	1	4		5	5	1	1,160
1909	474	206	168	134	194	49		11	7		2			1	1,246
1910	501	157	149	124	223	74	19	77	6	11	2				1,289

Table 62 presents a list of sixty-one mines arranged according to the largest amount of tonnage produced in which machines are used exclusively, giving the location of mine, number of machines and names of machines. The number of machines in use in these mines was 839; and the number of tons cut 12,474,471; this is 1,836,958 tons or 14.72 per cent more than last year.

Table 62—Mines in Which Machines Are Used Exclusively.

ber.				Machines.	m
Number.	Company.	Location.	No.	Name.	Tons,
1	Superior Coal Co., No. 3	Gillespie	38	12, Sullivan; 1, Ingersoll; 22, Harrison; 3, Jeffrey	693,029
2	Superior Coal Co., No. 2	do	45	27, Sullivan; 13, Ingersoll; 4, Harrison; I, Jeffrey	671,484
3	New Staunton Coal Co., No. 1	Livingston	14	Goodman	613,962
4	Mt. Olive & Staunton, No. 2	Williamson	13	11, Sullivan; 2, Jeffrey	548,220
5	Superior Coal Co., No. 1	Gillespie	44	43, Ingersoll; 1, Jeffrey	545,278
6	B. M. Coal & Iron Co., No. 8	Clifford	37	34, Sullivan; 1, Harrison; 2, Ingersoll	492,754
7	Consolidated Coal Co., No. 15	Mt. Olive	26	25, Sullivan; 1, Harrison	423,287
8	Saline County Coal Co	Ledford	12	9, Morgan-Gardner; 3, Goodman	423,257
9	Consolidated Coal Co., No. 15	Collinsville	30	29, Sullivan; 1, Harrison	408,073
10	O'Gara Coal Co., No. 3	Harrisburg	13	Morgan-Gardner	401,657
11	Lumaghi Coal Co., No. 2	Cantine	29	Sullivan	390,461
12	C. W. & V. Coal Co., No. 1	Thayer	13	12, Morgan-Gardner; 1, Good- man	382, 540
13	Consolidated Coal Co., No. 14	Staunton	28	26, Sullivan; 2, Harrison	374,898
14	Donk Bros. C. & C. Co., No. 2	Maryville	35	Sullivan	373,900
15	Franklin County Col. Co., No. 1.	Sesser	32	22, Sullivan; 10, Ingersoll	294,148
16	Southern C. & M. Co., No. 9	New Baden	31	Sullivan	294,137
17	Mt. Olive & Staunton, No. 1	Staunton	8	2, Sullivan; 6, Jeffrey	282,715
18	O'Gara Coal Co., No. 10	Eldorado	15	Morgan-Gardner	254,686
19	Carterville Dist. Coal Co., No. 1.	Marion	16	Sullivan	248,349
20	Hillsboro Coal Co	Hillsboro	9	8, Morgan-Gardner; 1, Jeffrey	245,780
21	Hart. Williams C. Co., No. 1	Benton	17	Morgan-Gardner	232,777
22	Kortkamp Coal Co	Hillsboro	10	Goodman	214,993
23	Breese-Trenton, Prairie Mine	Trenton	25	15, Ingersoll; 6, Harrison; 4, Sullivan	195,077
24	Madison Coal Corp., No. 5	Mt. Olive	18	Ingersoll-Sargeant	189,996
25	Lumaghi Coal Co., No. 3	Cantine	12	Sullivan	185,307
26	W. P. Rend Col. Co., No. 1	Rend	13	9, Morgan-Gardner; 4, Jeffrey	181,079
27	Stonington Coal Co	Stonington	5	Goodman	180, 477
28	Montgomery Co. C. Co., No. 1	Hillsboro	11	10, Sullivan; 1, Goodman	173,299

Table 62—Concluded.

ě	0			Machines.	Tons.
Number	Company.	Location.	No.	Name.	Tons.
29	DeCamp C. M. Co., No. 1	Staunton	6	Goodman	163,795
30	B. M. C. & I. Co., No. 9	Murphysboro	9	Sullivan	163,677
31	Marion Co. Coal Co., No. 2	Centralia	5	Goodman	157,717
32	Southern M. Coal Co., No. 8	Shiloh	7	5, Jeffrey; 1, Goodman; 1, Morgan-Gardner	157,566
33	Odin Coal Co	Odin	-8	4, Goodman; 4, Jeffrey	151,868
34	Mo. & Ill. Coal Co., No. 4	Willisville	6	Goodman	144,610
35	Vivian Col. Co	Greenridge	6	Morgan-Gardner	137,058
36	Consolidated Coal Co	Carlinville	15	Harrison	131,612
37	Willis C. M. Co., No. 1	Willisville	11	5, Sullivan; 6, Goodman	119,479
38	W. P. Rend Co., No. 2	Herrin	8	7, Morgan-Gardner; 1, Jeffrey	117.773
39	Superior C. & M. Co., Superior	Belleville	12	Herzler and Henninger	117,734
40	Kerns-Donnewald Coal Co	Worden	7	5, Jeffrey; 2, Goodman	107,624
41	B. M. C. & I. Co., Harrison	Murphysboro	17	Harrison	106,376
42	West Va. Coal Co., No. 1	Marion	5	Jeffrey	97,610
43	Moffat Coal Co., No. 1	Sparta	14	Sullivan	97,567
44	O'Gara Coal Co., No. 11	Eldorado	8	Morgan-Gardner	96,402
45	Illinois Fuel Co., No. 4	Sparta	5	Goodman	79,656
46	Consolidated C. Co., Green Mt	Belleville	6	Harrison	69,520
47	O'Gara Coal Co., No. 7	Carrier Mills	5	Morgan-Gardner	53,529
48	International C. & M. Co., Bennett	O'Fallon	6	York	46,447
49	Pond Creek C. Co., Franklin	Herrin	10	s, Sullivan; 2, Ingersoll	45,593
50	Consolidated Coal Co	Gillespie	6	Harrison	41,272
51	Dewey C. Co., Gartside, No. 4	Belleville	3	Harrison	25,469
52	Southern C. & M. Co., No. 1	do	4	Harrison	22,461
53	Southern C. & M. Co., Oakland.	do	5	Herzler and Henninger	20,807
54	Southern C. & M. Co., Avery, No.1	do	5	Sullivan	17,449
55	Schmidtgall Coal Co., No. 1	Murphysboro	3	Harrison	16,729
56	Consolidated Coal Co	Staunton	16	Harrison	14,317
57	Gus Blair B. M. C. Co., No. 2	Murphysboro	4	3, Harrison; 1, Ingersoll	14,253
58	Ritchey Coal Co	Pinckneyville	2	Harrison	6,603
59	Consolidated Coal Co	Staunton	12	Harrison	6,358
60	Livingston Coal Co	Lovington	2	Harrison	5,520
61	Third Vein Coal Co	Mapleton	2	Lee	4,000
	Total		839		12,474,471

Table 63 presents a list of the machines employed in mines where coal is cut wholly by machines. Showing the number of machines, mines, men, days, and tons produced.

Table 63—Machine Mining Exclusively, Name and Number of Machines, Number of Mines, Men, Days and Tons.

Name of Machines.	Machines.	Mines.	Men.	Days.	Tons.
Sullivan	151	8	2,022	168	1,770,847
Harrison	86	. 11	1,205	116	446,237
Morgan-Gardner	64	6	1,707	157	1,176,109
Goodman	51	7	1,777	199	1,555,210
Ingersoll-Sargeant	18	1	270	173	189,996
Herzler and Henninger	17	2	201	164	138,541
Yock	6	1	60	186	46,447
Jeffrey	5	1	126	165	97,610
Lee	2	1	35	50	4,000
Sullivan, 80—Harrison, 4	84	2	1,131	188	1,206,258
Sullivan, 39—Ingersoll, 14—Harrison, 26—Jeffrey, 4	83	2	1,112	211	1,364,513
Ingersoll-Sargeant, 17—Harrison, 7—Sullivan, 38	62	3	633	198	687,831
Ingersoll, 43—Jeffrey, 1	44	1	551	204	545,278
Sullivan, 30—Ingersoll, 12.	42	2	428	169	340,141
Morgan-Gardner, 24—Jeffrey, 6	30	3	606	193	544,632
Morgan-Gardner, 21—Goodman, 4	25	2	773	206	805,797
Sullivan, 15—Goodman, 7	22	2	392	172	292,778
Jeffrey, 8—Sullivan, 13	21	2	765	180	830,93
Jeffrey, 9—Goodman, 6	15	2	409	191	259,492
Goodman, 1—Jeffrey, 5—Morgan-Gardner, 1	. 7	1	210	141	157,566
Harrison, 3—Ingersoll, 1	4	1	41	176	14,253
Total	839	61	14,454	168	12, 474, 471

Table 64 presents an additional list of mines, where machines are only used in part in reducing the coal, giving the location of mine, number and names of machines, and tons produced.

Table 64—Mines in Which Only Part of the Output Is Cut by Machines.

ber.				Machines.	Tons.
Number.	Company.	Location.	No.	Name.	TOILS.
1	St. Louis & O'Fallon Coal Co	Caseyville	42	Sullivan	479,814
2	O'Gara Coal Co	Harrisburg	13	Morgan-Gardner	430,317
3	Shoal Creek Coal Co	Panama	12	Goodman	384,558
4	ChiCarterville C. Co., "A"	Herrin	33	Sullivan	340,512
5	Madison Coal Corp., No. 6	Divernon	11	9, Goodman; 3, Jeffrey	334,631
6	United C. M. Co., No. 1	Christopher	18	9, Goodman; 7, Morgan-Gardner 2, Jeffrey	327,585
7	O'Gara Coal Co., No. 3	Harrisburg	10	Morgan-Gardner	283,739
8	Benton Coal Co., No. 1	Benton	13	1, Goodman; 1, Jeffrey; 1, Sullivan; 10, Morgan-Gardner	279,038
9	O'Gara Coal Co., No. 14	Ledford	9	Morgan-Gardner	217,951
10	O'Gara Coal Co., No. 6	Harrisburg	13	Morgan-Gardner	213,902
11	Willis C. M. Co., No. 6	Percy	5	Goodman	199,995
12	Zeigler Dist. Col. Co., New Mine	Christopher	14	13, Jeffrey; 1, Morgan-Gardner	197,600
13	Madison Coal Corp., No. 2	Glen Carbon	8	Ingersoll-Rand	171,495
14	Royal C. & M. Co	Belleville	9	Sullivan	150,645
15	Big Creek Coal Co., No. 2	St. David	11	Morgan-Gardner	128,398
16	Sunnyside Coal Co., No. 1	Hen in	20	Sullivan	125,329
17	Saline Co. C. Co., No. 1	Ledford	3	1, Goodman; 2, Morgan-Gard- ner	111,984
18	Madison Coal Corp., No. 4	Glen Carbon	16	Ingersoll-Sargeant	110,326
19	Paradise Coal Co	Duquoin	6	Goodman	92,568
20	Southern Illinois C. Co., O. R	Herrin	10	Ingersoll-Rand	86,869
21	O'Gara Coal Co., No. 7	Carrier Mills	6	Morgan-Gardner	72,983
22	Peabody Coal Co	Nokomis	12	11, Sullivan; 1, Ingersoll	68,359
23	Peabody Coal Co., No. 2	Marion	6	3, Goodman; 3, Jeffrey	66,782
24	O'Gara Coal Co., No. 8	Eldorado	7	Morgan-Gardner	61,860
25	Big Creek Coal Co., No. 4	Dunsermilne	5	Morgan-Gardner	55,806
26	Gus Blair B. M. C. Co., No. 1	Murphysboro	7	3, Harrison; 4, Ingersoll	55,502
27	Gartside Coal Co., No. 4	do	5	Ingersoll-Sargeant	51,911
28	Standard Col. Co., No. 1	White Ash	6	3, Sullivan; 3, Ingersoll	49,652
29	Eldorado C. & M. Co., No. 1	Eldorado	4	Goodman	46,804

Table 64—Concluded.

			-		
per.	0			Machines.	Tons.
Number.	Company.	Location.	No.	Name.	Tons.
30	Sholl Bros	So. Bartonville		3, Jeffrey; 1, Sullivan; 1, Morgan- Gardner	46,502
31	Tazewell Coal Co	Pekin	4	Morgan-Gardner	40,650
32	O'Gara Coal Co., No. 12	Harrisburg	6	Morgan-Gardner	37,185
33	Southern C. & M. Co., No. 7	Belleville	7	Harrison	36,134
34	Edwardsville Coal Co., No. 3	Edwardsville	4	Ingersoll-Sargeant	31,706
35	Brazil Block Coal Co., No. 11	W. Franklin	10	7, Harrison; 2, Sullivan; 1, Ingersoll	29,728
36	Wolsehlay Co-op, Co	Peoria	2	Jeffrey	28,416
37	Keystone B. M. C. & C. Co., Keystone	Marion	8	Sullivan	26, 117
38	Pocohontas Coal Co., No. 1	Pocohontas	8	6, Ingersoll; 1, Sullivan; 1, Harrison	25,643
39	Scranton B. M. C. Co., Scranton	Marion	7	Ingersoll	24,416
40	Gartside Coal Co., No. 3	Murphysboro	5	Ingersoll-Sargeant	23,843
41	Carroll & Franklin Co. C. Co., No. 1	Hanaford	4	Morgan-Gardner	20,000
42	Bald Eagle M. Co., Bald Eagle .	Winkle	10	8, Sullivan; 2, Harrison	18,630
43	L. Senior, Branch Mine	Belleville	3	Harrison	17,798
44	National Coal Co	Middle Grove	3	Jeffrey	15,286
45	Norris City Coal Co	Norris City	2	Morgan-Gardner	14,598
46	Peabody Coal Co., No. 1	Marion	6	3, Goodman; 3, Jeffrey	12,663
47	Glenridge Coal Co	Virden	11	Link Belt	12,591
48	Centralia Coal Co., No. 5	Centralia	2	Goodman	11,781
49	So. Ill. C. & C. Co., P. R	Herrin	3	2, Sullivan; 1, Ingersoll-Rand	9,632
50	Moweaqua C. & M. Mfg. Co. No. 1	Moweaqua	2	2, Morgan-Gardner	6,566
51	Madison Coal Corporation, No. 8	Dewmaine	1	Jeffrey	5,823
52	Alden Coal Co., No. 6	Norris, No. 6	2	Jeffrey	4,650
53	German Coal Co	Hollis	1	Jeffrey	4,520
	Total		450		5,701,783

POWDER USED IN COAL MINES.

Table 65 presents the record of powder used in all mines in blasting down coal. The table is arranged by districts for the year and is supplemented by the record for ten previous years. The number of kegs of powder per man was 19.6; this being less than shown in seven previous years. The number of tons per keg of powder consumed was 35.75; this is a greater number of tons than shown for six previous years. The total number of kegs of powder consumed during the year was 1,257,223, of which 1,254,095 kegs were used for blasting and 3,128 kegs were used for other purposes.

Table 65—Distribution of Powder Used in All Mines, by Districts, and for Ten Previous Years.

		Pov	vder Used	in Blasting (`oal.	
Districts and Years.	Mines.	Men.	Kegs,	Tons of coal reduced.	Kegs per man.	Tons per keg.
First.	. 14	3,132	22,486	1,344,662	7.18	59.80
Second	133	5,208	126, 505	2,609,650	24.29	20.63
Third	106	3,773	105,369	2,189,466	27.93	20,78
Fourth	35	6,945	224,692	5,150,239	32.33	22,92
Fifth	51	5,943	106,817	3,546,822	17.97	33,20
Sixth	32	7,104	88,390	5,848,272	12.44	66,16
Seventh	42	7,241	111,252	5,912,442	15,35	53.14
Eighth	84	6,318	129,183	5,021,817	20,45	38,87
Ninth	71	9,353	108,595	6,632,074	11.61	61.0
Tenth	78	8,963	230,806	6,573,669	25.75	28,48
The State	646	63,980	1,254,095	44,829,113	19.60	35.75
1909	626	63,449	1,280,607	45, 511, 463	20,18	35.54
1908	702	59,943	1,328,454	45, 172, 171	23,51	32.28
1907	681	55, 591	1,261,910	42,080,835	22,70	33,35
1906	727	34, 452	1,027,373	34,260,359	29.82	33.25
1905	556	33,115	928,500	32,898,350	28,34	35.05
1904	591	29,924	923,418	32, 336, 448	30,86	35.02
1903	639	40,267	806,311	30,937,409	20.02	38,37
1902	657	36, 559	637,448	25, 566, 523	17.40	40.01
1901	585	34,570	477,612	16,283,180	13.82	34,09
1900	621	29,677	490,713	19,979,219	16.50	40.71

Table 66 gives by districts the number of shipping mines, number of miners, number of tons of coal produced and the number of kegs of powder burned. The average number of kegs of powder to each man was 40.72 and the average number of tons to each man was 1,473.

Table 66—Distribution of Powder in All Shipping Mines, by Districts.

Districts.	Number of mines.	Number of miners.	Total number of tons.	Number of kegs of powder.	Number of tons per man.	Number of kegs per man,	Number of tons per keg.
First	11	2,227	1,217,634	17,160	547	7.71	70,96
Second	30	2,988	2,382,466	116,462	797	38,98	20,46
Third	40	2,117	1,958,640	91,582	930	43.26	21,39
Fourth	30	4,306	5,073,878	221,313	1,178	51.40	22,93
Fifth	27	3,771	3,327,260	100,645	882	26.69	33,06
Sixth	27	1,736	5,834,289	88,027	3,361	50,71	66.28
Seventh	28	2,488	5,817,192	109,263	2,338	43.92	53.24
Eighth	65	3,151	4,892,326	125,036	1,553	39,68	39,13
Ninth	49	2,304	6,612,298	107,612	2,870	46.71	61,45
Tenth	48	4,519	6,504,860	228,633	1,439	50.59	28.45
Total	355	29,607	43,620,843	1,205,733	1,473	40.72	36.18

Table 67 presents the record of the use of powder in shipping mines, giving the results in mines where hand mining is followed exclusively.

Table 67—Consumption of Powder in Shipping Mines, Hand Mining Exclusively, by Districts.

Districts.	Number of mines.	Number of miners,	Number of tons.	Number of kegs of powder.	Number of kegs per man.	Number of tons per keg.
First	11	2,227	1,217,634	17,160	7.71	70,96
Second	26	2,774	2,016,649	104,866	37,80	19.23
Third	35	1,932	1,734,128	83,648	43,29	20,73
Fourth	28	4,306	4,350,807	213,970	49.69	20.33
Fifth	24	3,695	3,095,281	96,663	26.16	32,02
Sixth	10	1,383	1,393,389	50,354	36,41	27.67
Seventh	12	1,684	1,894,612	66,865	39.71	28,33
Eighth	48	2,620	2,609,833	95,491	36,45	. 27,33
Ninth	20	1,395	1,169,680	43,867	31.45	26.66
Tenth	27	3,144	3,401,448	169,754	53.99	20.04
Total	241	25,160	22,883,461	942,638	37.47	24.28
Percentage	67,89	84,98	52,46	78,18		

Table 68 follows table 67 and presents the same items for mines where machines are used exclusively.

Table 68—Consumption of Powder in Shipping Mines, Machine Mining Exclusively, by Districts.

Districts.	Number of mines.	Number of machines.	Number of miners.	Number of tons.	Number of kegs of powder.	Number of kegs per man.	Number of tons per keg.
Third	1	2	20	4,000	40	2,00	100.00
Fourth	1	13		382, 540	4,104		93,21
Fifth	2	7	16	185,997	982	61,38	189,41
Sixth	14	284	150	3,862,661	28,246	1,883,07	136,75
Seventh	11	168	443	3,269,706	26, 429	29,66	123,72
Eighth	12	122	146	1,257,826	14, 191	97,20	. 88,64
Ninth	11	134	129	2,208,227	20,239	156,90	109,17
Tenth	9	109	501	1,303,514	14,987	29,91	86.98
Total	61	839	1,405	12,474,471	109,218	74,81	114.22
Percentage	17,18	65,09	4.75	28 60	9,06		

Table 69 follows tables 67 and 68 and presents the same items for mines where hand and machine mining is combined.

Table 69—Consumption of Powder in Shipping Mines, Hand and Machine Mining Combined, by Districts.

Districts.	Number of mines.	Number of machines.	Number of miners.	Number of tons.	Number of kegs of powder.	Number of kegs per man.	Number of tons per keg.
Second	4	21	214	365,817	11,596	54.19	31.5
Third	4	12	165	220, 512	7,894	47.84	27.9
Fourth	. 1	11		340,531	3,239		105.1
Fifth	1	2	60	45,982	3,000	50,00	15.3
Sixth	3	35	203	578,239	9,427	46,44	61.3
Seventh	5	38	361	652,874	15,969	44,24	40.8
Eighth	5	66	385	1,024,667	15,354	39.88	66,7
Ninth	18	151	780	3,234,391	43,506	55,78	74.3
Tenth	12	114	874	1,799,898	43,892	50.22	41.0
Total	53	450	3,042	8,262,911	153,877	49.52	53.7
Percentage	14.93	34,11	10.27	18,94	12.76		

Table 70 gives the percentages of mines, miners, tons of coal and kegs of powder for four years, with the average kegs per man, and tons per keg.

Table 70—Percentages of Mines, Miners, Tons and Kegs of Powder Represented in Shipping Mines, Where Powder Is Used for Blasting Coal, Also Average, Kegs of Powder per Man and Tons per Keg.

		1910.			1909.			1908.	-	1907.		
	Min	ning B	y-	Min	ning B	y-	Min	ning B	у—	Min	ning B	y—
	Hand.			Hand.	Machine.	Hand and machine.	Hand,	Machine.	Hand and machine.	Hand.	Machine.	Hand and machine.
Per cent of number of—												
Mines	67.9	17.2	14.9	70.3	15.0	14.7	72.3	15.7	12.0	74.3	15.1	10.6
Miners	85.0	4.8	10.3	64.0	18.4	17.6	66.2	19.5	14,3	69.4	19.4	. 11.2
Tons	52.5	28.7	18.9	55.5	23.8	20.7	58.5	25.6	15.9	62.1	24.9	13.0
Kegs of powder	78.2	9.1	12.8	77.1	7,6	15.3	78.7	9.4	11.9	82.3	8.9	8,8
Average—												
Kegs per man		74.8	49.5	35.7 25.8	12.2	25.7	38.7	15.6	27.2	40.8	15.8	26.9
Tons per keg	Tons per keg 24.3 114.2 53.7				112.2	48.6	25.5	93.6	45.7	25.8	96.0	51.8

BLASTING DOWN COAL IN THE MINES.

Table 71 shows by districts the methods of mining coal in the 355 shipping mines of the State, in which powder is used for reducing the coal. In 67.89 per cent of these mines 52.46 per cent of the total tons was blasted from the solid; in 17.18 per cent of the mines 28.60 per cent of the tons was undercut before blasting; and in 14.93 per cent of the mines 18.94 per cent of the tons was mined by both named methods combined.

Table 71—Method of Mining in Shipping Mines Where Powder Is Used for Blasting Down the Coal—1910.

Districts.		ed from e Solid.		ndercut Blasting.		Methods sed.	Т	otal.
	Mines.	Tons.	Mines.	Tons.	Mines.	Tons.	Mines.	Tons.
First	11	1,217,634					11	1.217,63
Second	26	2,016,649			4	365,817	30	2,382,466
Third	35	1,734,128	1	4,000	4	220,512	40	1,958,640
Fourth	2.	4,350,807	1	-382,540	1	340,531	30	5,073,878
Fifth	24	3,095,281	2	185,997	1	45,982	27	3,327,260
Sixth	10	1,393,389	14	3,862,661	3	578,239	27	5,834,289
Seventh	12	1,894,612	11	3,269,706	5	652,874	28	5,817,192
Eighth	48	2,609,833	12	1,257,826	5	1,024,667	65	4,892,326
Ninth	20	1,169,680	11	2,208,227	18	3,234,391	49	6,612,29
Tenth	27	3,401,448	9	1,303,514	12	1,799,898	48	6,504,860
The State	241	22,883,461	61	12,474,471	53	8, 262.911	355	43,620,843

Table 72 shows the consumption of powder in shipping mines by counties and districts. There are 225 mines in this class, employing 22,731 miners and producing 25,592,033 tons. These use 997,287 kegs of powder or one keg to every 25.66 tons mined, and 43.87 kegs of powder to each miner employed. The number of tons of coal produced to each pound of powder used, varies from .80 tons in the second district to 2.05 tons in the ninth district.

Table 72—Consumption of Powder in Shipping Mines Where Shotfirers Are Employed and Coal Blasted from the Solid, by Counties and Districts—1910.

Counties and Districts.	Number of mines.	Number of miners.	Number of tons of coal.	Number of kegs of powder.	Number of pounds of powder.	Number of pounds of powder per man.	Number of tons of coal per pound of powder.
First				-		Ì	
Kankakee	1	65	8,435	350	8,750	135	0.96
Second	21	2,116	1,949,142	97,125	2,428,125	1,148	0.80
Fulton Henry	17	1,902	1,689,197 6,000	83,202 120	2,080,050 3,000	1,094 600	0.81
Mercer	2	199	246,192	13,333	333,325	1,675	0.74
Rock Island	1	10	7,753	470	11,750	1,175	0.66
Third	28	1,762	1,713,421	77,969	1,949,225	1,106	0.88
Livingston Logan	2 4	247 430	190,207 475,536	3,312 22,469	82,800 561,725	335 1,306	2.30 0.85
McLean	1	13	13,860	650	16,250	1,250	0.85
Menard Peoria	5 13	290	262,880	12,428	310,700	1,071	0.85
Tazewell	3	696 86	678,094 92,844	35,231 3,879	880,775 96,975	1,265 1,128	0.77 0.96
Fourth							
Sangamon	29	$=\frac{4,336}{}$	4,353,890	213,970	5,349,250	1,234	0.81
Tital							
Fifth	19	2,849	2,424,771	94,262	2,356,550	827	1.03
Christian	2	432	493,792	18,183	454,575	1,052	1.09
Macon Shelby	2	58 60	52,397 45,982	2,916 3,000	72,900 75,000	1,257 1,250	0.72 0.61
Vermilion	14	2,299	1,832,600	70,163	1,754,075	763	1.04
Sixth	10	1,240	1,578,523	60,168	1,504,200	1,213	1.05
Macoupin	6	954	936,575	44,132	1,103,300	1,157	0.85
Montgomery	4	286	641,948	16,036	400,900	1,402	1.60
Seventh	13	2,021	2,243,482	77,813	1,945,325	963	1.15
Bond	1	100	103,537	5,990	149,750	1,498	0.69
Clinton Madison	3	590 415	706,798 519,747	24,530 17,942	613,250 44,550	1,039 1,081	1.15 1.16
Marion	6	916	913,400	29,351	733,775	801	1.16

Table 72-Concluded.

Counties and Districts.	Number of mines.	Number of miners.	Number of tons of coal.	Number of kegs of powder.	Number of pounds of powder.	Number of pounds of powder per man.	Number of tons of coal per pound of powder.
Eighth	42	2,496	2,548,475	90,888	2,272,200	910	1.12
Randolph	6 36	377 2,119	398,761 2,149,714	16,714 74,174	417,850 1,854,350	1,108 875	0.95 1.16
Ninth	28	1,919	3,740,299	72,992	1,824,800	951	2.05
Franklin Gallatin Perry	8 1 11	522 17 1,060	2,028,715 16,608 894,580	24,275 821 26,549	606,875 20,525 663,725	1,163 1,207 626	3.34 0.81 1.35
Saline White	7	296 24	776,616 23,780	20,813	520,325 13,350	1,758 556	1.49
Tenth	34	3,927	5,031,595	211,750	5,293,750	1,348	0.95
Jackson	1 33	35 3,892	175,661 4,855,934	5, 297 206, 453	132,025 5,161,325	3,784 1,326	1.33
The State	225	22,731	25,592,033	997,287	24,932,175	1,097	1.03

SUMMARY OF ALL MINES.

Tables 73, 74, 75 and 76 presents by districts a summary of all the items gathered by the State Inspectors from the operators of all the coal mines in the State.

Table 73—Summary by Districts—Shipping and Local Mines—Number of Counties, Mines and Production—1910.

			1							
		lines.	sed.		G	raded Proc	luct—Tons	s of⊶		
Districts and Mines.	Counties.	Number of Mines	Total tons of coal produced.	Minerun	Lump.	Egg.	Nut.	Pea.	Slack or waste.	
First	5	58	3,018,246	360,054	1,718,988	321,156	17,036	562,265	38,747	
Shipping	5	29	2,818,570	187,897	1,694,464	321,156	16,811	560,765	37,477	
Local	3	29	199,676	172,157	24,524		225	1,500	1,270	
Second	7	216	3,880,765	336,582	2,095,681	470, 271	112,569	781,274	84,388	
Shipping	5	37	3,555,007	284,443	1,848,554	470,271	108,791	766,371	76,577	
Local	7	179	325,758	52,139	247,127		3,778	14,903	7,811	
Third	9	120	2,815,979	747, 251	1,357,865	6L,689	134,333	447,331	68,510	
Shipping	9	46	2,573,305	640,265	1,240,485	60,689	134,333	436,038	61,495	
Local	6	74	242,674	106,986	117,380			11,293	7,015	
Fourth	7	108	5,210,662	1,163,838	2,119,806	442,029	169,537	1,193,730	121,722	
Shipping	1	31	5,076,961	1,111,525	2,055,819	442,029	152,370	1,193,730	121,488	
Local	7	77	133,701	52,313	63,987		17,167		234	
Fifth	5	60	3,776,768	1,797,070	1,108,316	55,133	128,067	609,335	78,847	
Shipping	5	30	3,540,393	1,626,127	1,068,068	55,133	109,816	603,182	78,067	
Local	4	30	236,375	170,943	40,248		18,251	6,153	780	
Sixth	5	37	5,862,508	832, 470	3,226,308	264,149	75,923	1,372,370	91,288	
Shipping	2	27	5,834,289	819,379	3,213,486	264,149	75,923	1,370,064	91,288	
Local	5	10	28,219	13,091	12,822			2,306		
Seventh	5	44	5,913,722	714,778	2,849,365	411,748	236,592	1,209,593	491,646	
Shipping	4	28	5,817,192	668,792	2,809,089	405,647	236,592	1,205,426	491,646	
Local	2	16	96,530	45,986	40,276	6,101		4,167		
Eighth	2	86	5,031,524	1,353,986	2,586,800	40,925	251,237	689,142	109,434	
Shipping	2	65	4,892,326	1,281,294	2,526,738	40,925	251,004	683,071	109, 294	
Local	2	21	139,198	72,692	60,062		233	6,071	140	
Ninth	6	73	6,632,666	1,377,241	2,124,980	692,039	633,626	1,713,081	91,699	
Shipping	6	49	6,612,298	1,371,332	2,113,457	690,739	632,190	1,713,081	91,499	
Local	_ 4	24	20,368	5,909	11,523	1,300	1,436		200	
Tenth	3	79	6,575,013	1,537,186	1,581,821	575,920	1,087,773	1,596,556	195,757	
Shipping	2	48	6,504,860	1,499,205	1,561,311	575,120	1,087,773	1,586,626	194,825	
Local	_3	31	70,153	37,981	20,510	800		9,930	932	
The State	55	881	48, 717, 853	10,220,456	20,769,930	3,334,059	2,846,693	10,174,677	1,372,038	
Shipping	41	390	47, 225, 201	9,490,259	20,131,471	3,325,858	2,805,603	10,118,354	1,353,656	
Local	43	491	1,492,652	730,197	638,459	8,201	41,090	56,323	18,382	

Table 74—Summary by Districts of the Total Tons, Aggregate Value and the Disposition of the Output—1910.

		Aggregate	Average	Di	sposition o	foutput—	ons.
Districts and Mines.	Total tons produced.	value of total product.	value per ton all grades.	Shipped from mine.	Supplied to loco- motives at mine.	Sold to local trade.	Consumed and wasted at mine.
First	3,018,246	\$1,587,044	\$1,52	2,457,179	111,995	269, 913	239,159
Shipping	2,818,570	\$1,234,691	\$1.502	2,457,179	111,170	133,202	117,019
Local	199,678	352,353	1.955		825	. 6,711	122,140
Second	3,880,765	\$5,175,693	\$1,334	3, 297, 96	63,077	401,520	118,199
Shipping	3,555,007	\$4,607,463	\$1,293	3,297,989	63,077	80,932	113,029
Local	325,758	568, 230	1.744			320,518	5.170
Third	2,815,979	\$3,630,928	\$1,311	2,112,621	118,415	432,983	151,960
Shipping	2,573,305	\$3,269,818	\$1,271	2,112,621	118,415	212, 221	130,048
Local	242,674	361,110	1,488			220,762	21.912
Fourth	5, 210, 662	\$5,169,095	\$0.992	4,706,433	83, 531	271,415	149, 283
Shipping	5,076,931	\$1,909,765	80.979	4,706,433	83,531	140,898	146,099
Local	133,701	199,330	1,50			130, 517	3,184
Fifth	3,776,768	\$3,9'9,389	\$1,043	2,983,414	100,859	523, 508	169,007
Shipping	3,540,393	\$3,640,010	\$1,028	2, 983, 414	100,839	358,315	97,825
* Local	236,375	299,379	1.267			165,193	71,182
Sixth	5,862,517	\$5,407,104	\$0,922	5,370,335	32,214	220, 561	239,398
Shipping	5, 834, 298	\$5,354,145	80.918	5,370,335	32,214	193,155	238, 585
Local	28,219	52.959	1.877			27,406	813
Seventh	5,913,722	\$5,375,386	\$0,909	5,294,642	181,034	213, 213	224,833
Shipping	5,817,192	\$5,260,256	\$0,906	5, 294, 642	181,034	118,448	223,068
Local	96,530	115,130	1.193			94,765	,1,765
Eighth	5,031,524	\$4,671,822	\$0.928	4,544,769	76,226	217,466	193,063
Shipping	4,892,326	\$1,506,907	80.921	4,544,769	76,226	81,401	189,930
Local	139,198	164,915	1,785			136,065	3,133
Ninth	6,632,666	\$6,061,582	\$0.914	6,160.585	63,136	246,718	162,227
Shipping	6,612,298	\$6,034,271	\$0.913	6,160,585	63,136	226,841	161,736
Local	20,368	27,311	1,341			19,877	491
Tenth	6, 575, 013	\$6,186,164	\$0.941	6,079.068	55,750	130,574	309,621
Shipping	6,504,860	\$6,102,122	\$0,938	6,079,068	55,750	60,728	309,314
Local	70,153	84,042	1,198			69,846	307
The State	48,717,853	\$50,204,207	1.031	43,007,015	886,217	2,867,871	1,956,750
Shipping	47,225,201	\$47,979,448	\$1.016	43,007,015	885,392	1,606,141	1,762,653
Local	1,492,652	2,224,759	1,49		\$25	1,261,730	230,097

Table 75—Summary by Districts, Tons Mined by Hand and Machine, Price for Mining, Machines, Powder—1910.

First	and, 18,246 18,570 99,676 50,877 25,758 91,891 49,217	204,130 204,130 124,088 124,088	\$0.822 \$0.824 0.792 \$0.725 \$0.709	\$0.55	Number of mines using.	Number in use.	Used for blasting coal. 22,486 22,486	For other purposes.
Shipping 2,8 Local 1! Second 3,6 Shipping 3,3 Local 3: Third 2,6! Shipping 2,4 Local 2: Fourth 4,4!	18,570 99,676 676,635 50,877 25,758 91,891 49,217	204,130 204,130 124,088	\$0.824 0.792 \$0.725 \$0.709 0.792		4	21	22,486	
Local 15 Second 3,6° Shipping 3,3 Local 3 Third 2,6° Shipping 2,4 Local 2 Fourth 4,4°	99, 676 176, 635 150, 877 25, 758 191, 891 149, 217	204,130	\$0.792 \$0.725 \$0.709 0.792		4	21		507
Second 3,6 Shipping 3,3 Local 3 Third 2,6 Shipping 2,4 Local 2 Fourth 4,4	576,635 50,877 25,758 91,891 49,217	204,130	\$0.725 \$0.709 0.792		4	21	196 505	
Shipping 3,3 Local 3: Third 2,66 Shipping 2,4 Local 2: Fourth 4,44	25,758 91,891 49,217	204,130	\$0,709 0,792		4	21	196 505	
Local 3: Third 2,6: Shipping 2,4: Local 2: Fourth 4,4:	25,758 91,891 49,217	124,088	0.792	\$0.55			120, 303	843
Third	91,891 49,217				4	21	126, 505	843
Shipping	49, 217							
Local		124.088	\$0.693	\$0.525	5	14	105,369	125
Fourth	42,674	12,000	0.688	\$0.525	5	14	105, 369	125
			\$0.74					
Shipping 4.3	93,491	717,171	\$0.565	\$0.517	2	24	224,692	205
	59,790	717,171	\$0.557	\$0.517	* 2	24	224,692	205
Local13	33,701		0.834					
Fifth 3,58	84,205	192, 563	\$0.583	\$0.48	3	9	106,817	320
Shipping 3,34	47,830	192,563	\$0.576	\$0.48	3	9	106,817	320
Local 23	36,375		0.708					
Sixth	34,339	4,328,169	\$0.558	\$9.48	17	319	88,390	380
Shipping 1,50	06,120	4,328,169	\$9,555	\$9.48	17	319	88,390	380
Local2	28, 219		0.867					
Seventh 2,29	93,065	3,620,657	\$0.54	\$0.476	16	206	111, 252	99
Shipping 2,19	96, 535	3,620,657	\$0.536	\$0.476	16	206	111,252	99
Local	96,530		0.622					
Eighth 2,88	89,312	2,142,212	\$0.556	\$0.482	17	188	129,183	21
Shipping 2,75	50,114	2,142,212	\$0.555	\$0.482	17	188	129,183	21
Local	39,198		0.571					
Ninth	58,335	4,674,331	\$0.511	\$0.433	29	285	108,595	497
Shipping 1,93	37,967	4,674,331	\$0.509	\$0,433	29	285	108,595	497
Local 2	20,368		0.657					
Tenth	02,080	2,172,933		\$0.418	21	223	230,806	131
	31,927	2,172,933	\$0.483	\$0.418	21	223	230,806	131
Local 7	70,153		0.564					
		18, 176, 254	\$0.604	\$0.462	114	1,289	1,254,095	3,128
Shipping 29,04	48,947	18, 176, 254	\$0.597	\$0.462	114	1,289	1,254,095	3,128
	92,652		0,756	-				

Table 76 — Summary by Districts, Employés, Days in Operation, Casualties—1910.

	m + 1		Emp	ployés.		Ave age	Casualties.		
Districts and Mines.	Total number employés.	Miners.	Others under ground.	Boys under ground.	All above ground.	days of opera- tion.	Killed.	Injured.	
First	7,412	5,409	1,295	109	599	186	8	113	
Shipping	7,086	5,169	1,249	105	563	202	5	11.	
Local	326	240	46	4	36	170	3		
Second	8,951	6,201	1,965	80	705	161	*266	100	
Shipping	8,064	5,428	1,964	79	593	182	265	103	
Local	887	773	1	1	112	156	1		
Third	5,488	3,726	1,121	95	546	178	7	1	
Shipping	4,988	3,312	1,114	92	470	193	5	1-	
Local	500	414	7	3	76	170	2		
Fourth	7,255	4,676	1,954	99	526	169	9	59	
Shipping	6,875	4,336	1,954	94	491	170	8	51	
Local	380	340		5	35	167	1		
Fifth	6,470	4,338	1,499	126	507	197	20	69	
Shipping	6,137	4,090	1,465	122	460	170	20	69	
Local	333	248	34	4	47	218			
Sixth	7,146	1,796	4,597	167	586	182	6	3.	
Shipping	7,069	1,736	4,597	167	569	185	6	3.	
Local	77	60			17	174			
Seventh	7,247	2,667	3,896	80	604	176	22	10	
Shipping	7,002	2,488	3,873	80	561	188	21	103	
Local	245	179	23		43	154	1		
Eighth	6,337	3,273	2,484	67	513	180	16	5	
Shipping	6,175	3,151	2,481	66	477	175	15	. 51	
Local	162	122	3	1	36	192	1		
Ninth	9,360	2,376	6,055	119	810	147	29	12-	
Shipping	9,279	2,304	6,055	119	801	169	29	12	
Local	81	72			9	104			
Tenth	8,968	4,607	3,271	212	878	165	23	5	
Shipping	8,845	4,519	3,271	206	849	161	23	5	
Local	123	88		6	29	168			
The State	74,634	39,069	28,137	1,154	6,274	171	406	143	
Shipping	71,520	36,533	28,023	1,130	5,834	179	397	73	
Local	3,114	2,536	114	24	440	165	9		

Physical Characteristics of the Coal Mines of the State—1910.

Table 77 is a complete list of the coal operators of the State, showing the location of the mines, the geological number of the seams, the depth of coal of each mine below the surface, the thickness of the seam, the character of the mines, the methods of mining and the total tons produced. The list is arranged by counties alphabetically.

Table 77—Physical Characteristics of Coal Mines—1910.

BOND COUNTY.

					De	serip	tion	of Plan	ıt.		
Number.	Name of Operator.	Postoffice address of the mines, or near- est postoffice.	Depth of coal—feet and inches.	Thickness of seam— feet and inches.	Geological number of seam.	Shaft, slope or drift.	Hoisting—steam, horse or hand.	Long wall or pillar and room.	Haulage—motor, mule, cable, hand.	Hand or machine mine.	Total tons.
1	Pocahontas Mining Co., No. 1.	Pocahontas	380	7.6	6	Sh	St	PR.	Mule.	Both.	103,537
	Total—1 mine										103,537

BROWN COUNTY.

G. F. Holtkamp M. W. Bates		2.0 2.0	2 2	Dr . do	Hd. do	PR.	Hd	Hd	160 80
Total—2 mines	 								240

BUREAU COUNTY.

			_				1			
Spring Valley C. Co., No. 3	Spring Valley	457	3.6	2	Sh	St				
				١. ا				Mule.	Hd	237,821
Spring Valley C. Co., No. 5	Dazell	339	3.6	2	do	do	do	do	do	212,522
Spring Valley C. Co., No. 1	Spring Vallev	421	3.6							203,336
Ill. 3d Vein C. Co., No. 1	Ladd	468	3.6	2	do	do	do	do	do	192,692
		392	3.6							179,706
St. Paul C. Co., No. 2	Cherry			6	do	do	do	do	do	163,044
Marquette 3d Vein C. M. Co.,										
No. 1	Marquette	289	3.6							137,309
										7,200
										6,656
										6,400
										2,800 1,720
C. W. Killey	snemerd	50	4.0	0	uo	u0	40			440
Total—15 mines										1,352,994
10tal 10 miles						1				, ,
	Spring Valley C. Co., No. 5 Spring Valley C. Co., No. 1. Ill. 3d Vein C. Co., No. 1. Spring Valley C. Co., No. 4. St. Paul C. Co., No. 2. Marquette 3d Vein C. M. Co., No. 1. L. F. Brandt. Donahue & Jones. Jas. Neave. Rockyran Coal Co. Maşters Bros. P. C. Nelson. John Griffith C. W. Riley.	Spring Valley C. Co., No. 5. Dazell. Spring Valley C. Co., No. 1. Spring Valley Ill. 3d Vein C. Co., No. 1. Ladd Spring Valley C. Co., No. 4. Seatonville. St. Paul C. Co., No. 2. Cherry. No. 1. L. F. Brandt. Marquette Mineral. Donahue & Jones Sheffield Jas. Neave. do Rockyran Coal Co. Tiskijwa Masters Bros. Sheffield P. C. Nelson do Dybu Criffith Princeton C. W. Riley Sheffield	Spring Valley C. Co., No. 5 Dazell	Spring Valley C. Co., No. 5 Dazell	Spring Valley C. Co., No. 1 Dazell	Spring Valley C. Co., No. 5 Dazell	Spring Valley C. Co., No. 5 Dazell	Spring Valley C. Co., No. 5. Dazell. 339 3.6 2 do. dodo.	Spring Valley C. Co., No. 5. Dazell. 339 3.6 2 do., dododo.	Spring Valley C. Co., No. 5 Dazell

CALHOUN COUNTY.

1	Calhoun Brick & Clay Co	Golden Eagle	60	4.2	2 [Or . S	5t	РВ.	Mule.	Hd	4,620
	Total—1 mine										4,620

CHRISTIAN COUNTY.

					De	scrij	tion	of Pla	nt.		
Number.	Name of Operator.	Postoffice address of the mines, or near- est postoffice.	Depth of coal—feet and inches.	Thickness of seam- feet and inches.	Geological number of seam.	Shaft, slope or drift.	Hoisting—steam, horse or hand.	Long wall or pillar and room.	Haulage-motor, mule, cable, hand.	Hand or machine mine.	Total tons.
2 S 4 S 5 F 6 S 7 F 8 A	hristian County Coal Co- pringfield Coal Mining Co- ana Coal Co., No. 1. tonington Goal Co. enwell Coal Co., Penwell mith Lobr Coal Mining Co. ana Coal Co., No. 2. sssumption Coal & Mining Co. W. Vanderver.	-do- Pana	1004	8 8 8 8 8 8 3.5	6 6 6 6 6 1&2	do do do do do do do	dododododo	do do do do do L.W.	Motor .do do Mule .Motor .do .do . Mule .Motor .dododo .	do do do do do	284,579 209,213 184,533 180,477 154,177 129,456 89,666 60,781 24,611
	Total—9 mines										1,317,48

CLINTON COUNTY,

2 3	Southern C. & M. Co., No. 9. Co-operative C. & M. Co., No. 1 Breese Trenton M. Co., E M Breese Trenton M. Co., Buxton	Breese	392 400	7.6	6	do	do	do	Motor	Hd do do	224,894
	Total—4 mines										1,000,935

EDGAR COUNTY.

_								-		
1	J. N. Williams	Paris	60	5.0	6 Sh	St	RP. M	Tule.	Hd	371
	Total-1 mine									371

FRANKLIN COUNTY.

							1				
1	United C. M. Co., No. 1	Christopher	500	9.7	6	Sh	St.	PR.	Motor	M	374,272
2	Benton Coal Co., No. 1	Benton	630	9.	6	do	do	do	do	Both.	332,127
3	Zeigler Dist. C. Co., N. Mine	Christopher	517	10.	6	do	do	do	do	M	301,269
4	Franklin Co. C. Co., No. 1	Sesser	720	8.6	6	do	do	do	do	do	294,148
5	Brazil Block C. Co., No. 11	W. Frankfort	500	9.	6	do	do	do	do	Both.	255,805
	Hart-Williams C. Co., No. 1			9.	6	do	do	do	do	M	232,777
7	W. P. Rend Col. Co., No. 1	Rend	525	8.	6	do	do	do	do	do	181,079
8	Big Muddy-Cart, M. Co., No. 1	Royalton	214	7.	6	do	do	do	Mule.	Hd	57,238
9	Carroll & Franklin Co. C. Co., No. 1.						í				
	No. 1	Hanaford	705	7.	6	do	do	do	do	M	27,609
10	So. Ill. C. & C. Co., P. R	Herrin	347	12.	6	do	do	do	do	do	14,819
	Total-10 mines										2,071,143

FULTON COUNTY.

					De	scrip	tion	of Plat	nt.		
Number.	Name of Operator.	Postoffice address of the mines, or near- est postoffice.	1	Thickness of seam— feet and inches.	Geological number of seams.	Shaft, slope or drift.	Hoisting—steam, horse, or hand.	Long wall or pillar and room,	Haulage—motor, mule, cable, hand.	Hand or machine mine.	Total tons.
1 22 3 4 4 5 5 6 7 7 8 9 9 1 1 1 1 1 1 5 1 1 6 7 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	Monmouth Coal Co., No. 1 Maplowood Co. Co., No. 2. Canton Coal Co., No. 2. Simmons Coal Col., No. 3. Simmons Coal Co., No. 4. Nortis C. M. Co., Nortis. Star Coal Co., No. 1. Star Coal Co., No. 2. Alden Coal Co., No. 5. Eagle Mining Co., No. 1. Star Coal Co., No. 6. National Co., No. 6. National Co., No. 1. Alden Coal Co., No. 6. National Co., No. 6. National C. M. Co. Big Creek C. Co., No. 3. Newsam Bros. Spoon River Co. Coal Creek Minard Coal Co. Coal Creek Minard Coal Co. Star Coal Co., No. 3. J. R. Riley S. E. Lee Geo. Westerby Niel Baxter J. Sutton H. Vonach J. Seivers. J. McLaughlin Hiverview. M. Bushnoll Hiverview. M. Bushnoll River Coal A. J. Gunnett Maloon & Gofineh F. Tompkins Anderson & Savill Joe Williams Loe Wil	Fairynew Cuba. Guba. Breeds Breeds Farmington. Canton. Cuba. -do. Canton. Ellisville Astoria. St. David. Lewiston Astoria. Cuba. -do. Cuba. Cuba. Cuba. Cuba. Cuba. Cuba. Suba. Sub	40 60 60 40 130 30 10 16 44 44 - 33 60 - 22	4.4 5.5 5.4 4.6 6.4 5.5 6.4 4.6 6.4 6.4 6.4 6.4 6.5 6.6 6.6 6.6 6.6 6.6 6.6 6.6 6.6 6.6	555555555555555555555555555555555555555	do Dr. do do do do do do do do sh do	dodododododododo.	-dodododododododo.	Muledododododododo -	do Both. Hd do do	210,549 1166,961 1164,157 1144,573 1144,573 1144,573 1152,346 110,379 189,596 182,299 189,596 183,415 18,538 182,299 183,415 18,538 18,
5 5	Robinson & Stevens 2 Henry Vice. 3 W. E. Homback. 4 E. Bishop. 5 Joe Wilson 6 Foraker & Miller. 7 J. Gillett.	St. Augustine . Fairview Rapatee	:	2. 4. 3.	6 8	1 Dr 6 do. 5 do. 5 do. 5 do. 5 do. 5 do.	. Hd . do. . do. . Ho . Hd . do.	- do. - do. - do. - do. - do. - do.	- do. - do. - do. - do. - do. - do. - do.	-dodododododododo.	900 800 800 800 800 800 800 770

FULTON COUNTY-Concluded.

					De	scri	tion	of Pla	ut.		
Number.	Name of Operator,	Postoffice address of the mines, or near- est postoffice.	Depth of coal—feet and inches.	Thickness of seam- feet and inches.	Geological number of seam.	Shaft, slope or drift.	Hoisting—steam, horse or hand.	Long wall or pillar and room.	Haulage-motor, mule, cable, hand.	Hand or machine mine.	Total tons.
61 62 63 64 65 66 66 67 77 77 77 77 77 77 77 77 77 77	Delong Bros. W. A. Phillips. G. Mimmens. S. Mimmens. S. Mimmens. S. Mimmens. S. Mimmens. D. Coplinger J. Finfrock. W. A. Eyman D. Coplinger J. Finfrock. W. A. A. Eyman J. Finfrock. W. A. Ackerson. E. Clackson. J. Stuffle-Ram. J. W. Williams. J. Steff. L. S. Barry. N. C. Morgan. D. W. Heller. S. A. Arnett. J. Stuffle-Ram. J. J. W. Williams. J. A. Mann. L. B. Clark. Wilcoxen Bros. J. R. Collins. R. World. M. J. Stout. Ruy Bussle. H. Crunan. J. D. Cluts. L. M. Turner. Stas Simpson. Arthur Steele. Guy Menchloff. Guy Menchloff. Guy Menchloff. E. E. Possvenson. W. B. Morgart. G. B. Whitehead. C. A. Hall	Fairview Peoria Canton Fairview Lewiston Cuba Cuba Cuba Cuba Cuba Cuba Cuba Cuba	St	4. 4. 5. 3. 5. 5. 5. 5. 5. 5. 5. 5. 5. 5. 5. 5. 5.	65551555666111555555555555555555555555	do	de d	P - R	documents docu	-do	717 707 600 600 600 600 600 600 600 600 60

GALLATIN COUNTY.

			Description of Plant.									
Number.	Name of Operator.	Postoffice address of the mines, or near- est postoffice.	Depth of coal— feet and inches.	Thickness of seam—feet and inches.	Geological number of seam.	Shaft, slope or drift.	Hoisting—steam, horse or hand.	Long wall or pillar and room.	Haulage-motor, mule, cable, hand.	Hand or machine mine.	Total tons.	
2 3 4 5 6 7 8	Gallatin C. & C. Co., No. 1. Hickory Hill Coal Co. J. O. Baldwin Josh Anderson R. J. Mitchell Reid & Brice Robert Gulley Sam Black J. P. Strong.	-do - do - do - do - Shawneetown - Saline Mines - Equality - Junction	30 44 30 30 80 80 50	4.6 4. 4. 4. 4. 4.	5 6 6 6 6 6	Sl Sh do do do	do do M do do Hd	do do do do do do	Mule. do do do	do do do do	52,407 16,608 2,900 2,400 627 560 520 520	
	Total—9 mines										76,692	

GREEN COUNTY.

Kincaide & Mitchell P. L. Tucker		2.6 2.6			Hd	
Total—2 mines	 		 	 		 4,660

GRUNDY COUNTY.

-											
1	C. W. & V. C. Co., No. 1	S. Wilmington.	169	3,3	2	Sh	St	LW.	Mule.	Hd	167,270
2	Big Four Wilm, C. Co., No. 6.	Coal City	100	3.3	2	do	do	do	do	do	155,982
3	Braceville C. Co., No. 6	Braceville	112	3.3	2	do	St	do	do	do	143,652
4	C. W. & V. C. Co , No. 2	S. Wilmington.	195	3.3	2	do	do	do	do	do	105,610
	Wilm, Star M. Co., No. 6		90							do	
6	Big Four Wilm, C. Co., No 5.	Carbon Hill	99	3.0						do .	
7	C. W. & V. C. Co, No. 3	S. Wilmington	180							do	
	Wilm. Star M. Co., No. 7									do	
	Acme Wilm. C. Co., Lilly									do	
10	Clayton Bros	Morris	50	2.10						Hd	8,000
	Hodson & Ledwards		50							do	
	Wood C. Co		48							. do	2,660
	Byrmes & Fleming		62						do		2,500
14	James Bell	do	34	2.8						do	2,000
15	Wm. Mitchell	do		2.10						do	
16	John Mitchell	do	50	2.9						do	
	Max Davidson & Son		33	2.10	2	do	do	do	do	do	
	John Stalker		50							do	1,200
	John Heather		75							do	1,088
			,,,	-10	_			2011	2,011	2000	-71.00
	Total—19 mines										927,152
											,

HANCOCK COUNTY.

2 E.	. C. Courtney	do	45	2.6 2.6 2.6	2	do	do	do	do	Hd do	1,499
	Total—3 mines										10,009

HENRY COUNTY.

2 Atlas C. Co., No. 4. Galva 65 4. 6 do. dodod. Hd. do. 9,1.1 and Donahue Coal Co. Moline. 50 4.6 1 StMdo. Mule. do. 6.00 4 Fred Henry Kewanee. 55 4. 6 do. Stdo. Hd. do. 7,21 6 Kewanee Co-operative C. Codo. 6 8 4. 6 ShHododo. do. 6,00 5 Bates Brosdodododododododo						Des	scrip	tion	of Plar	ıt.		
2 Atlas C. Co., No. 4. Galva 65 4. 6 do. dodod. Hd. do. 9,1.1 do. 3 Donahue Coal Co. Moline. 50 4.6 1 StMdo. Mule. do. 6.00 4 Fred Henry Kewanee. 55 4. 6 do. Stdo. Hd. do. 7,21 do. 6 Kewanee Co-operative C. Codododododododod	Number.	Name of Operator.	address of the mines, or near-		Thickness of seam— feet and inches.	Geological number of seam.	Shaft, slope or drift.			Haulage—motor. mules, cuble, hand.		
	3 4 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 22 23 24	Atlas C. Co., No. 4 Donahue Coal Co Fred Henry Fred Henry Bates Bros. Kewanee Co-operative C. Co Fairlie Bros. Matt Atkinson. North Main Coal Co. R. Todd & Sons. E. S. Barlow E. Barlow E. Barlow E. Barlow Genname Left. Glem. James Komerling Ernest Gray. John Kincade. Joe Carter Robt. Kay R. E. Maleon. L. A. Williams H. C. Finch. John Summerson	Galva Moline Kewanee .do	6550 500 555668 600 1400 500 1400 556 300 200 200 200 500 456	4.6 4.4 4.4 4.4 2.6 4.4 4.3 3.5 4.4 4.3 3.5 4.3 4.4 4.3 4.4 4.3 4.4 4.3 4.4 4.3 4.4 4.3 4.4 4.4	6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6	do Sl do Sh Sh do Sh do Sh Sh	doMStHoStdoHdoStHdoStHdoStHdoStHdoStHdoStHdoStHdoStHdoStHdoStStHdoStStHdoStStStStStStSt	-dodododododododo.	Hd Mule Hddo .	-dodododododododo.	63,415 9,155 6,000 7,200 6,949 5,385 5,000 3,869 2,750 2,750 2,750 600 600 3300 248 240 240 2125 600

JACKSON COUNTY.

1	Muddy Valley M. & Mfg. Co	Hallidayboro	165	6.3	7	Sh	St	P_R	Cable	Hd .	175,661
2	Big Muddy C. & I. Co., No. 9.	Murphyshore	150						Motor		163,677
2	B. Muddy C. & I. Co., Harrison	do	150	6.6					do		106,376
	Gartside Coal Co., No. 4		125	6.6					Mule.		57,598
	Gus Blair B. M. C. Co., No. 1.		125	6.6					Cable		56,540
			146	6.6					Male.		24,887
	Gartside C. Co., No. 3										16,729
7	Schimdtgall C. Co., No. 1	do	120	3.6					do		
- 8	Chi. & Car. C. Co., Elk Ridge.	Carbondale	90	9.					do		15,478
	Peacock C. Co		61	9.					do		15,248
	Gus Blair B. M. C. Co., No. 2.			3.6					do		14,253
	J. B. Woods			7.					Mule.		7,700
12	H. S. Phillips	do		7.					do		5,000
13	Nisbet & Wilson	Ανα	40	4.	2	Dr.	Mu.	do	do	do	1,618
14	V. L. Church	do	36	4.	2	Sl	Ho.	do	do	do	1,344
	Wm. Wilkinson			9.	7	do	do	do	do	do	815
	W. F. Johnson		32	4.	2	Sh	do	do	do	do	720
	J. B. Schimpi			4.	2	Sl	do	do	do	do	520
18	W. B. Campbell	Mathews	15	4.	2	do	do	do	do	do	405
10	H. G. Limkins	Campbell Hill		4.					do		384
	M. Kirby		7							do	360
21	Geo. W. Patrick	Carbondalo							do		72
21	Geo. W. I all lok	Car bondale	22	1.		UII	au.				12
	Total—21 mines										665,385

JEFFERSON COUNTY.

_											
Number.	Name of Operator.	Postoffice address of the mines, or near- est postoffice.	Depth of coal—feet and inches.	Thickness of seam— feet and inches.	Geological number of seam.	Shaft, slope or drift.	Hoisting—steam, horse or hand.	Long wall or pillar and room.	Haulage—motor, mule, cable, hand.	Hand or machine mine.	Total tons.
1 2	T. G. Watts	Mt. Vernon Opdyke	863	4.10 3.0	7 2	Sh do	St do	PR.	Mule.	Hd	8,485 32 8,517

JERSEY COUNTY.

1	Cairns & Balt	Brighton	20	4.	5	Sh	Ho.	PR.	Hd	Hd	1,600
	Total—1 mine										1,600

JOHNSON COUNTY.

2	J. W. Tyler W. T. Kidgove John Hampton	Tunnel Hill	40	4.6 3.6 4.6	2	S1	Ho.	do	do	Hd do	204
	Total—3 mines										1,084

KANKAKEE COUNTY.

1	Clarke City Wilm. C. Co., A	Clarke City	108	4.8	7	Sh	St	PR.	Mule.	Hd	8,435
	Total—1 mine								- -		8,435

KNOX COUNTY.

8,000
5,025
4,182
3,440
1,600
1,600
1,600
1,520
1,500
1,500
1,360
1,360
916
800
700
600

KNOX COUNTY-Concluded.

1					Des	scrip	tion	of Plan	it.			
Number.	Name of Operator.	Postoffice address of the mines, or near- esf postoffice.	Depth of coal—feet and inches.	Thickness of seamer feet and inches.	Geological number of seams.	smatt, slope or drift.	Hoistingsteam, horse, or hand.	Long wall or pillar and room.	Haulage-meter, mule, cable, hand.	Hand or machine mine.	Total tons.	
18 A 19 C 20 Jo 21 L 22 J 23 C 24 E 25 F W	. I. Foster . Tthur Sloan . has, Morgan . bha Todd . ouis Nodine & Son . A. King . B. McGrew li Anderson . orrest White . m. Nelson . m. Fish	Oneida. Victoria. Wataga Victoria. Galesburg Victoria. Oneida. Victoria.	30 60 18 42	4. 4. 4. 4. 2.6 4. 4.	6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6	do SI SI Sh Dr Sh do Dr.	do Ho. Ho. do Hd. Ho. do IId.	PR do	do do do do do do do do	do do do do do do do do	600 400 400 300 300 200 166 199 80	
	Total- 27 mines										38,67	

LASALLE COUNTY.

1		1 1			
I Oglesby Coal Co., Oglesby	Oglesby	464	3.6	2 Sh., St., LW. Motor Hd 17	3,112
1 Oglesby Coal Co., Oglesby 2 LaSalle Co. C. Co., No. 1 3 LaSalle Co. C. Co., No. 5	La Salle	440	3.6		3,320
3 LaSalle Co. C. Co., No. 5,	do	375	3.6		1,974
4 Chi. Wilm. & V. C. Co., No. 2.	Streator	245	3.6		7,449
5 Chi. Wilm, & V. C. Co., No. 3	do		5.0		6,576
6 La Salle Co. C. Co., Union	Peru	390	3.6		5,454
7 LaSalle Co. C. Co., LaSalle	La Salle	391	3.6		0,055
S LaSalle Co. C. Co., Rockwell	do	544	3.4		6,337
9 Ill. Zine Co., No. 1		130	3.0		0.687
10 Cahill C. Co	Peru	350	3.6		6,058
11 Acme Coal Co., Acme	Streator	110	6.6		9,949
12 Harrison Coal Co., No. 1	do	245	3.8		4,996
13 Mrs. E. Hakes, No. 2	Rutland	500	2.9	2 do., do., LW.,do.,do., 1	7,765
14 Streator Fuel Co	Streator	86	4.5	7 do., do., PR.,do.,do., 1	9,370
15 Spicer Coal Co	Marsielles	85	2.9	2 do do do do do	9,246
16 M. & H. Zine Co., M. & H	La Salle	310	4.6		5,740
17 Mfg. C. Co., Galloway	Marseilles	120	4.6		6,496
18 Frances Fuel Co		112			8,368
19 Oscar Kimes		40	4.6		3,000
20 Brooker Bros		60	3.0		1,616
21 Wm. Bottomley		50	3.5		768
22 John McNeal			4.0		520
23 Buchanan Bros		70	2.6		500
24 McClerman & Hughes	Kangley	60	4.0		440
25 Chas. Handee	Ottawa	60	2.4	2 Dr . Ho do Hd do	333
26 Jos. Starkey	Streator	70	3.0		300
27 C. J. Clark			3.3		275
28 Jerry Pratte	do	60	3.0		250
29 James McCullough		60	2.4		250
30 Adam Crompton	do	50	2.4		220
31 Thos. Francisco	Kangley	65	2.0		200
32 R. H. Buyin	Ottawa	50	2.4		170
33 G. Steele	do	55	2.4	2 do dododo	150
Total—33 mines				1.47	1,944
				.,	-,,,,,,

LIVINGSTON COUNTY.

					Dea	scrip	tion	of Plan	t.			
Number.	Name of Operator.	Postoffice address of the mines, or near- est postoffice.	Depth of coal—feet and inches.	Thickness of seam— feet and inches.	Geological number of seam,	Shaft, slope or drift.	Hoisting—steam, horse or hand.	Long wall or pillar and room.	Haulage—motor, mule, cable, hand.	Hand or machine mine.	Total tons.	
2 3 4 5 6 7	Cardiff C. Co., No. 2. Fairbury C. Co., No. 1. Brady C. Co. Streator Clay Mfg. Co. Fairbury Miners Corp. C. Co. Ed. E. Evans. Streator Aqueduct Co. W. J. McMillen Total—8 mines.	Fairbury Pontiac Stieator Fairbury Streator -do -do	158 206 36 158 50 36	5.5 4.6 5.6 4.	6 6 7 6 7	do do do do	do do do Ho. St	RP. do do do do	do do do Hd	Hddododododododo	166,395 23,812 13,503 12,750 9,501 6,250 3,156 1,707	

LOGAN COUNTY.

2	Latham C. Co., N. Shaft Citizen C. M. Co Lincoln M. Co Mt. Pulaski Coal Co., No. 1	do	290 285	5. 5.	5 5	do	do	do	cable.	Hd do do	106,428
	Total—4 mines										475,536

MACON COUNTY.

3	Mfg. & Cons. Coal Co. Decatur C. Co., No. 2 Decatur C. Co., Niantic. Decatur C. Co., No. 2 Blue Mound C. M. Co.	do do	 5. 5.	5 5 5	do do	do do	do	do	do	37,356
	Total—5 mines		 							265,530

MACOUPIN COUNTY.

Gilloppio	350 8,0	6 Sh. St . PR. Motor Mac. 693,029
1 Superior Coal Co., No. 3 Gillespie		
2 Superior Coal Co., No. 2 do	324 8.	6 do. dododo. 671,484
3 Superior Coal Co., No. 1,do	348 8.	6 do. do. do. do. 545,278
4 Consolidated C. Co., No. 15 Mt. Olive	362 8,	6 do. dodo. Muledo. 423,387
5 Consolidated C. Co., No. 14 Staunton	322 7.6	
6 Royal Colliery Co Virden	350 6.6	6 do. dodododo. 372,674
7 Girard Col. Co., No. 5 Girard	360 7.	
8 Madison C. Corp., No. 5 Mt. Olive	370 7.0	
9 Vivian Col. Co., Greenridge Greenridge	320 7.	
10 Consolidated C. Co., No. 8 Mt. Olive	340 7.0	
11 Carlinville Coal Co Carlinville	320 6.	6 do. do. do. Mule Hd 65,938
12 Lukins & Andrews S. Mine Virden	350 6.0	
13 Glenridge Ccal Co., No. 1do		6 do. dodo. Motor -do. 50,965
14 Consolidated C. Co., Gillespie. Gillespie	346 8.	6 do . dodo . Mule . Mac 41,272
15 Consolidated C. Co., No. 6 Staunton		
15 Consolidated C. Co., No. U Statiston		
16 Consolidated C. Co., No. 7do	320 7.0	0,558

MACOUPIN COUNTY-Concluded.

Number.	Name of Operator.	Postoffice add ess of the mines, or near- est postoffice.	Depth of coal—feet and inches.	Thickness of seam- feet and inches.	Geological number of seam.	Shaft, slope or drift.	Hoisting—steam, horse or hand.	Long wall or pillar and room.	Hanlage—motor, mule, cable, hand.	Hand or machine mine.	Total tons.
18 19 20 21	Nilwood Coal Co. Wm. Neil. Bawser-Treusdale. J. J. Harbough G. B. Loper. Fritz Jarden. Total—22 mines.	Bunker Hill chesterville do Bunker Hill	254 240 28 28	6. 4. 4.	6 5 5	do do do	do do do	do do	do Hd	Hddo do Hddo do	4,310

MADISON COUNTY.

-										
-	N. Staunton C. Co., No. 1	Livingston	007	6.0	coh	04	D D	35-4	Mac.	010.000
2	Mt. O. & Staun. C. Co., No. 2.	Williamcon	300				do			613,962
3	Lumaghi Coal Co., No. 2	Cantino	165						. do	548,220
4	Donk Bros. C. & C. Co., No. 2.	Marroillo			6 do	do	uo	do	- do	390,461
5	Mt. O. & Staun. C. Co., No. 1.	Staunton	292	6.	6 do	do	do	do	uu	373,900
6	Donk Bros. C. & C. Co., No. 1.	Donkville	135	6.			do			282,715
7	Donk Bros. C. & C. Co., No. 3	Trov	280	5.			do			264,696 229,431
é	Madison C. Corp., No. 2	Glon Corbon		1.			do			
0	Madison C. Corp., No. 4	do do	110	6.			do			195,218
10	Madison C. Corp., No. 4 Lumaghi C. Co., No. 3	Cantino	170	7.			do			187,983 185,307
11	De Camp C. M. Co , No. 1	Staunton	292	6.			do			163,795
12	Kerns-Donnewald C. Co	Worden	270	7.	6 do	do.	do	do	TI M	107,624
	Edwardsville C. Co., No. 3			6.			do			34,263
14	Brookside C. Co	Trov	278	5.	6 do.	do.	do	do	do	25,620
15	Independent C. Co	Cantina	168	7.	6 do	do	do	do	do	21,229
16	St. L. & Ill. C. Co., No. 1	Edwardeville	180	6.					do	23,028
17	Abbey C. M. Co	Collingville	210	6.	6 do	do	do	Hd	do	22,440
18	Edwardsville Home T. C. Co .	Edwardsville	225				do			21,354
19	Bullock Bros	Collinsville	135				do			13,196
	Trop Corp. C. & M. Co		275	5.			. do			5,600
	Perry Meyers			4					do	1,800
22	Big Mound C. Co	N. Douglas	426	6.	6 do	St.	do	Mule	do	1,300
23	Geo. Kable	Мого	54	4.	6 do	Ho.	do	Hd	do	1,300
	Theo. Schueller		165	7.			do			1,073
25	James Hill	Bethalto	75	4.	6 do	Ho.	do	do	- do	1,000
26	Peter Syddell	N. Alton	40	2.	1 do	do	do	do	do	800
27	W. H. Backs	Carpenter	150	6.	6 do	do	do	do .	do	800
28	Ernest Rink	Bethalto	75	4.	6 do	do	do	do	do	560
	Ben Eccles			2.	I do	do	do	do	do	480
	Total—29 mines									3,719,155

MARION COUNTY.

_										
1	Centralia Coal Co., No. 2	Centralia	576	6.0	6	Sh. St.	. PR.	Motor	Hd	237,856
	Centralia Coal Co., No. 4				6	do. do.	.,do	do	do	203,911
3	Marion County C. Co., No. 1	do	680	8.	6	do. do.	do	Mule.	Mac.	157,717
4	Odin Coal Co., Odin	Odin	716	6.	6	do. do.	do	Motor	do	151,868
5	ChiSandoval C. Co., No. 2	Sandoval	609	6.	6	do. do.	do	Mule.	Hd	144,114
6	Centralia, No. 5	Centralia	550	6.	6	do. do	do	Motor	do .	131,873
	Chi. & Sandoval, No. 1				6	do do.	do	Mule.	do	37,929
	Total-7 mines									1,065,268
										-,,

MARSHALL COUNTY.

_					De	scrip	tion	of Plar	ıt.		
Number.	Name of Operator.	Postoffice address of the mines, or near- est postoffice.	Depth of coal— feet and inches.	Thickness of seam— feet and inches.	Geological number of seam.	Shaft, slope or drift.	Hoisting—steam, horse or hand.	Long wall or pillar and room.	Haulage—motor, mule, cable, hand.	Hand or machine mine.	Total tons.
3 4 5 6 7 8 9	Toluca Coal Co., No. 1 & 2 Wenona Coal Co., No. 1 Fulton County Coal Co., No. 1 Lacon Coal Co. R. H. Ingram. John Curtis. W. M. Baughn. W. Rear. E. O. Frisby.	Sparlanddo	164 Dr. do do do do	2.6 3. 3. 3.	2 7 7 7 7 7	do do do do do do do	do do do do do do	. do PR . . do . do . do . do	Cable M	Hddodododododododododo	14,102 7,629 6,295 800 600 280 210
	Total—10 mines	}									372,446

McDONOUGH COUNTY.

		_			-					
1 Burney Coal Co	Colobostor	58	2.6	9	Sh	2+	PP	Hd	TJ d	6,534
2 Kipling, Foster & Stone		55	2.6	2				do		3,35
3 John Wilson		55	2.6					do		1,57
4 Charley Atkinson		45	2.6					do		1,44
5 W. H. Robinson		58	2.6		Ch.	do	do	do	do	1,440
6 J. M. Grav		60	2.6	2	Du	II.	do	do		
7 C. E. Waddell		50	2.6	0				do		1,100
8 Chas. Norse			2.6	1 6				do		1,020
9 Phillip Jennings		40	2.6					do		840
10 T. E. Wilson		50	2.6					do		68
		40	2.6	2				do		640
11 Joseph Bent			2.0	2	DT.	na.	(10	do	do	600
12 Fox Bros	do	51	2.6							56
13 Sam Oldham	do	50	2.6					do		480
14 C. P. Sweeny	vermont	50	2.6					do		470
15 Wm. Malen		45	2.6					- do		432
16 Harp & Gilgore	do	60	2.6					do		411
17 Lee Maclure	:-do	50	2.6					do		400
18 Curry Veil	Macomb	40	2.6					do		400
19 Lee Maclure		50	2.6					do		400
20 W. L. Stoneking		30	2.6					do		400
21 J. O. Thompson		40	2.6					do		361
22 Amous Atkins		45	2.6					do		334
23 J. W. Kipler	do	40	2.6					do		320
24 Wayland Bros	do	40	2.6	2				do		320
25 Thos. Nelson		80	2.6	2				do		320
26 S. M Malard		60	2.6					do		300
27 Harp & Kilgan		60	2.6					do		251
28 Eli Milliam		40	2.6		do			do		240
29 Elmer Swanson		20	2.6					do		234
30 Murray & Martin		50	2.6					do		200
31 Wm. M. Dickerson		€0	2.6					do		200
32 Fred Curtis		40	2.6					do		170
33 John Berry		30	2.6					do		165
34 Marion Mallin		50	2.6					do		140
35 Wm. Hulson		50	2.6					do		130
36 Kipling & Kipling		60	2.6					do		120
37 J. E. Smith		40	2.6					do		116
38 Frank Burdick	Industry	30	2.6					do		108
39 Alla Vawters		50	2.6					do		100
40 Anton Tokosick		40	2.6					do	do	88
41 James Wayland		40	2.6					do		80
42 Henry Hocker	do	50	2.6					do		60
43 T. L. Willey	Macomb	40	2.6	2	do	do	do	do	do	40
Total-43 mines										27,483
Total-43 mines										27

MCLEAN COUNTY.

					De:	scrip	tion	of Plan	ıt.		
Number.	Name of Operator.	Postoflice address of the mines, or near- est postoflice.	Depth of coal—feet and inches.	Thickness of seam— feet and inches.	Geological number of seam.	Shaft, slope of drift.	Hoisting—steam, horse or hand.	Long wall or pillar and room.	Haulage—motor, mules, cable, hand.	Hand or machine mine.	Total tons.
1 2	McLean County Coal Co Colfax Co-operative Co	Bloomington Colfax	541 400	3.6	2&5 6	Sh	St	L. W. PR.	Cable M	Hd	88,000 13,860
	Total-2 mines										101,860

MENARD COUNTY.

1									
Athens	185	6.0	5 8	sh.,	St	PR.	M	Hd	83,673
Middletown	210	6.	5 d	lo.	do	do	do	do	69,028
Athens	200	6.	5 d	io.	do	do	Motor	do	52,073
Petersburg	85	6.							38,063
									32,078
Greenview	110	6.	5 d	lo	do	do	do	do	26,022
Tice	120	6.0							20,500
									8,07
									2,61
Petersburg	70								1,950
do		5.6							1,77
Tallula		5.6							1,748
Athens.		5.6	5 d						900
									200
	-01		0 0						200
									338,708
									220,100
	Middletown. Athens Petersburg. Pallula. Greenview Tice. Tallula. Sweetwater - do. Tallula. Additional. Additional. Athens. Middletown.	Middletown. 210 Athens. 200 Petersburg. 85 Tallula. 185 Greenview. 110 Tiee. 120 Tallula. 100 Sweetwater. 90 Petersburg. 70 do. 7allula. Athens. Middletown. 104	Middletown 210 6 Athens 200 6 Petersburg 85 6 Tallula 185 6 Greenview 110 6 Tiec 120 6 Tallula 100 6 Sweetwater 90 5 6 Petersburg 70 5 6 Grallula 5 6 Athens 5 6 Middletown 164 6	Middletown. 210 6 5 Athens. 200 6 5 Petersburg. 85 6 5 Fetersburg. 85 6 5 Greenview 110 6 5 Tallula. 150 6 5 Tallula. 100 6 5 Tallula. 100 6 5 Tallula. 100 6 5 Tallula. 5 6 5 Petersburg. 70 5 6 5 Tallula. 5 6 5 Tallula. 5 6 5 Athens. 5 6 5 Middletown. 164 6 5	Middletown. 210 6 5 do. Athens 200 6 5 do. Athens 200 6 5 do. Tallula 185 6 5 do. Greenview 110 6 5 do. Tallula 100 6 5 do. Tallula 100 6 5 6 do. Tallula 5 6 5 do. Tallula 5 6 5 do. Tallula 5 6 5 do. Middletown 164 6 Middletown 164 6 Middletown 164 6 Middletown 164 6 Middletown 164 Middletown	Middletown. 210 6 5 do. do. Athens. 200 6 5 do. do. Petersburg. 85 6 5 do. do. Petersburg. 85 6 5 do. do. Tallula. 155 6 5 do. do. Tiee. 120 6 0 5 do. do. Tallula. 100 6 5 do. do. Tallula. 100 6 5 do. do. Tallula. 100 6 5 do. do. Tallula. 70 5 6 5 do. do. Petersburg. 70 5 6 5 do. do. Tallula. 5 6 5 do. do. Tallula. 5 6 5 do. do. Middletown. 104 6 5 do. do.	Middletown 210 6 5 5 60 40 0 40 Petersburg 85 6 5 5 60 40 Petersburg 85 6 5 5 60 40 Tallula 185 6 5 5 60 40 Tree 120 6 5 5 60 40 Tallula 180 6 5 5 60 40 Tallula 180 6 5 5 60 40 Tallula 190 6 5 5 60 40 Tallula 190 6 5 5 60 5 Tallula 190 6 5 5 60 Tallula 190 6 5 5 60 Tallula 190 6 5 5 60 Tallula 5 6 5 5 6 Tallula 5 6 5 5 Tallula 5 6 Tallula 5 6 5 Tallula 5 6 Tallula 5 6 5 Tallula 5 6 Tallula 5 Tallula	Middletown. 210 6. 5 do. do. do. do. do. Athens. 200 6. 5 do. do. do. Motor Petersburg. 85 6. 5 do. do. do. Motor Petersburg. 85 6. 5 do. do	$ \begin{array}{cccccccccccccccccccccccccccccccccccc$

MERCER COUNTY.

					ł			1	1	
1 Coal Valley Mining Co., No. 2.	Sharrard	212	3.6	1	Sh	St	PR.	Cable	Hd	164,399
2 Empire Coal Co., No. 3	Gilehrist	145	4.	1	do	do	do	do	do	81,793
3 Coal Valley M. Co., No. 3			4.6	1	do	do	do	Mule.	do	22,603
4 Alden Coal Co., No. 7			5.	1	do	do	do	do	do	6,442
5 W. H. Riddle				1	do	Ho.	do	Hd	do	11,160
6 Doeherty Bros			4.					do		2,980
7 Arthur Jones			4.						do	2,920
8 W. P. Williams			4.						do	2,464
9 Essley Bros			3.4					do		2,270
10 J. A. Peterson			3.					do		1.760
II Mack Posten			3.6					do.,		1,640
12 B. B. Peterson			3.6					do		700
13 M. A. Beers								do		650
14 L. Gustafson									do,	300
15 Geo. Langston	do		3.6	1	do	do	(lo	do	do	51
/ L										
Total 15 mines										302,139

MONTGOMERY COUNTY.

					De	serip	tion	of Plan	ıt.		
Number.	Name of Operator.	Postoffice address of the mines, or near- est postoffice.	Depth of coal—feet and inches.	Thickness of seam— feet and inches.	Geological number of seam.	Shaft, slope or drift.	Hoisting—steam, herse or hand.	Long wall or pillar and room.	Haulage—motor, mule, cable, hand.	Hand or machine mine.	Total tons.
3 4 5 6 7 8	Shoal Creek C. Co., No. 1 Hillsboro Coal Co. Burnwell Coal Co., No. 24. Kortkamp C. Co., Kortkamp Burnwell Coal Co., No. 22. Montgomery Co. C. Co., No. 1. Clover Leaf C. M. Co., No. 2. Peabody C. Co., Nokomis. Farmers ville C. M. Co., No. 2. Litchfield C. G., No. 7 Raymond C. Co., No. 7 Total—11 mines.	Hillsboro Witt Hillsboro Witt Hillsboro Coffeen Nokomis Farmersville Litchfield Raymond	400 430 500 400 450 410 500 360 684	7.6 8. 7.6 7.6 7.6 7.6 7.6	6 6 6 6 6 6 6 6	do do do do do do do do do	do do do do do do do do do	do do do do do do do do	Cable Muledodo Motor .do Muledo	Maedo Hd Mac Hd Mac Hd -dodo	429,270 245,780 226,282 214,993 204,377 173,299 125,164 98,004 51,424 36,990 6,520 1,811,203

MORGAN COUNTY.

Glen H. Fisher		4.6 4.6		PR. do		
Total—2 mines	 ••••		 	 	 	1,708

MOULTRIE COUNTY.

1	Lovington C. M. Co	Lovington	920	8.	6	Sh	St	PR.	Mule.	на	5,520
	Total—1 mine		· • · ·								5,520

PEORIA COUNTY.

1 Clark C. & C. Co., No. 2 Bartlett 105 4.6 5 Sh., St., PR. Moto	r Hd 148,735
2 Clark C. & C. Co., No. 1	. do. 122,289
3 Sholl Bros., No. 3	. do. 76,669
4 Wolschlay Co-op, Coal Co Peoria 4.6 5 Dr. dodododo	Both. 72,337
5 Crescent Coal Co	.Hd 55,483
6 Applegate & Lewis Hanna City 250 4.6 5 Sh. dodo M	
7 Newsam Bros., Kingston 3 Peoria 4.6 5 Dr. dodo Moto	
8 Collie: Co-operative Coal Co Bartonville 138 4.6 5 Sh dodo M	- do. 46,733
9 Warsaw Coal Co., Warsaw Edwards 4.6 5 Dr. dododo.	
10 Mapleton Coal Co., No. 1 Mapleton 4.6 5 Sl. dodo. Cabl	
II Newsam Bros., Reed City Peoria 50 4.6 5 Sh dododo	
12 August Reentz. Kramm 4.6 5 Dr. dodo M	
13 Olympia C. M. Co., No. 1 Edwards 4.6 5 do., do., -do., Moto	
14 Lancaster Landing, No. 1 & 2. Kingston Mines 4.6 5 do., do., do., Mule	
15 Newsam Bros, No 2do	
16 German Coal Co Hallis 4.6 5 dododododo	
17 Aug. Reentz Young Sidney 4.6 5 do . do do do	

PEORIA COUNTY-Concluded.

				De	sei ip	tion	of Plan	it.		
Name of Operator.	Postoflice address of the mines, or near- est postoflice.	Depth of coal—feet and inches.	Thickness of seam— feet and inches.	Geological number of seam.	Shait, slope or drift.	Hoisting—steam, horse or hand.	Long wall o. pillar and room.	Haulage—motor, mule, cable, hand.	Hand or machine mine.	Total tons.
6 Tussnar Bros. 7 David Roberts. 8 Nick Enyelke. 9 Nick Enyelke. 10 Joseph Raddbeck. 1 L. Clarksom. 2 Schotte & Withell. 3 J. W. Miller. 4 Fred Martin. 5 Kirkman & Ames. 6 Thos. Jones & Son. 7 Stout & Henning. 1 Harry Green. 1 Harry Green. 1 Harry Green. 2 Harry Green. 3 Harry Green. 4 Wm. Vicory. 5 Wm. Simmens. 5 Robert Scott. 6 Wm. Pool. 6 Wm. Pool. 6 Wm. Pool. 7 Keefe & Mohn. 8 Wm. Cramer. 9 Ash Johnson. 90 Burdois & Swinger.	Bartonville do do Peoria do	50 90 755 130 60 755 27 75 27 35 27	4.66 4.66 4.66 4.66 4.66 4.66 4.66 4.00 4.66 4.00 4.66 4.00 4.66 4.00 4.66 4.00 4.66 4.66	55555565566556765555555555555666566555555	dodododododododo.	dodododododododo.	P-R, -do, -do, -do, -do, -do, -do, -do, -do	-dodododododododo.		4,0 N N 2 N 1 N 1 N 1 N 1 N 1 N 1 N 1 N 1 N

^{*} Stripping.

PERRY COUNTY.

Number.	Name of Operator.	Postoffice -address of the mines, or near- est postoffice.	Depth of coal—feet and inches.	Thickness of seam— feet and inches.	Geological number of seams.	Shait, slope or drift.	Hoisting—steam, horse or hand.	Long wall or pillar and room.	Haulage—motor, mule, cable, hand.	Hand or machine mine.	Total tons.
4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22	Bailey Bros. C. Co., No. 3. Diamond Fuel Co., Diamond. Duquoin Coal Co., No. 3. New Moon M. Co., N. M. Ritchey Coal Co. Wilson Coal Co. Strait Coal Co. John Anderson J. T. Schnieder B. O. Cook. A. S. Redfern.	Pinckneyville Willsville do do Unilsville Un	400 374 313 90 82 80 122 275 220 80 80 55 141 120 86 40 24 30 25	9.00 6.00 6.00 6.00 6.00 6.00 6.00 6.00	66666666666666666666666666666666666666	do	do	PR	do. Mule. do. Motor Mule. Motor Mule. do. do. do. do. do. do. do. do. do. do. do. do. do.	dododododododod	266, S10 220, 449 155, 934 148, 505 144, 610 119, 479 74, 480 26, 692 54, 996 49, 040 26, 517 16, 220 12, 193 5, 708 3, 500 1, 600 1, 102 1, 1

PUTNAM COUNTY.

St. Paul Coal Co., No. 1 B. F. Berry Coal Co., No. 1			h stdo		
Total→2 mines	 	 		 	 470,132

RANDOLPH COUNTY.

-			1		1	1	1	1	1	1	
1	Willis C. & M. Co., No. 6	Percy	86	6.0	- 6	Sh	St	PR.	Motor	Mac.	227,047
2	Bessemer W. C. Co., Crystal	Tilden	208	6.0	6	do	do	do	Mule.	Hd	126,070
	Moffat Coal Co., No. 1			6.0				do			97,567
4	Illinois Fuel Co., No. 4	do	72	6.0	6	do.	do.	do	do.	. do.	79,656
5	Jones Bros. C. & M. Co., Eure-										10,
-	ka, No. 2	Tilden	181	6.0	6	do	do	do	do	Hd	69.594
6	Wilson Bros. C. Co., No. 7	Sparta	80	6.0				do			68,015
7	Bessemer W. C. Co., Tilden	Tilden	180	6.0				do			54,265
8	Boyd C. & C. Co., No. 1	Sparta	90	6.0				do			
9	Randolph Co. C. M. Co., Old										· '
	Mine	Coulterville	320	6.0	6	do	do	do	Mule.	do	39,899
10	West Mine Coal Co	do	176	6.0	6	do.	do	do	do	do	28,397
11	J. C. Boyle & Son	Sparta	98	6.0	6	do	do	do	do	do	8,400
	J. W. Wright			6.0	6	do	do	do	Hd	do	3,112
	J. W. Bixby			6.0	6	do	do	do	do.,	do	2,292
14	John Adams	Willisville	42	6.0	6	do	do	do	do	do	1,737
	Total—14 mines										846,969

ROCK ISLAND COUNTY.

					De	scrip	tion	of Plan	t.			
Number.	Name of Operator.	Postoffice address of the mines, or near- est postoffice.	Depth of coal—feet and inches.	Thickness of seam- feet and inches.	Geological number of seam.	Shaft, slope or drift.	Hoisting—steam, horse or hand.	Long wall or pillar and room.	Haulage—motor, mule, cable, hand.	Hand or machine mine.	Total tons.	
2 3 4 5 6 7 8 9	Stocks & Schadt Eureka Coal Co. Axel, E. Link. Chas. Roseman. Jamerson & Irwin Hampton Coal Co. Stone Bros.	do Moline Carbon Cliff Coal Valley Sunny Hill Carbon Cliff Moline Hampton Moline	68 60 70 125 40 60 70 50	4.0 3.0 3.4 4.6 3.6 3.6 3.6 3.0	1 1 1 1 1 1 1 1 1 1 1	do do do Sl do Sh do do	do do do do do do Ho St	PR. do. do. do. do. do. do. do. do. do.	do do do do do do do	do., do., do., do., do., do., do., do.,	7,753 21,164 8,366 8,140 8,078 2,154 2,080 1,800 1,030 810	
	Total—11 mines										61,525	

SALINE COUNTY.

1	O'Gara Coal Co., No. 9	Harrisburg	150 7.0	5 Sh. St. PR	Viotor Mae	432,566
	Saline Co. C. Co., No. 2	Ledford		5 do. do do.		423,257
	O'Gara Coal Co., No. 3	Harrisburg		5 do do do.		401,657
	O'Gara Coal Co., No. 4	do		5 do do do.		285.015
5	O'Gara Coal Co., No. 10	Edwards		5 do., do.,do.		254,686
6	O'Gara Coal Co., No. 1	Harrisburg		5 do., do.,do.		247, 575
	O'Gara Coal Co., No. 14	Ledford		5 do., do.,do.		220, 181
	Wasson Coal Co., No. 1	Harrisburg		5 do dodo.		190,723
	Saline County C. Co., No. 1	Ledford	144 7 0	5 do dodo.		132,067
	Eldorado C. M. Co., No. 1	Eldorado	400 5 6	5 do., do.,do.		98,670
11	O'Gara Coal Co., No. 11			5 do dodo.		96, 402
19	O'Gara Coal Co., No. 7	Carrier Mills		5 do., do.,do.		82,550
	O'Gara Coal Co., No. 8		410 4.10	5 do., do., ., do.		69,579
14	O'Gara Coal Co., No. 15			5 do., do.,do.		53,529
1.5	O'Gara Coal Co., No. 12	Harrisburg	425 5 0	5 do., do.,do.	dodo	41,578
16	Galatia Coal Co	Galatia	340 5.8	6 do., do.,do.	. Mule. Hd	22,924
	Davenport M. Co	Carrier Mills	100 4 6	5 do., do.,do.		2,106
18	John Ingram	Harrisburg	25 4.0	5 Dr. dodo.		3,200
19	Glass & Norman	do	25 4.0	5 do., do.,do.		2,816
20	Tom Osborn	Eagle		5 do do do.		325
21	S. J. Moore	Equality	30 4.0	6 Sl., do.,do.		275
22	J. W. Inboden & Son	do		6 do., do.,do.		
23	Evart Clark	Mitchellville	30 4.0	5 Sh., do.,do.		60
	Willis Henson		20 4.0	5 Sl., do.,do.		48
	John Ward			5 do., do.,do.		
	John Yates			6 do., do.,do		32
27	John Reynolds	do	20.4.0	6 do., do.,do		32
28	Maggie Hart	do	20 4.0	6 do., do.,do	do do	32
						0.000.000
	Total—28 mines					3,062,098
			1 1	1 1 1	1 1	1

SANGAMON COUNTY. .

					Des	scrip	tion	of Plar	ıt.		
Number.	Name of Operator.	Postoffice address of the mines, or near- est postoffice.	Depth of coal—feet and inches.	Thickness of seam—feet and inches.	Geological number of seam.	Shaft, slope or drift.	Hoisting—steam, horse or hand.	Long wall or pillar and room.	Haulage—motor, mules, cable, hand.	Hand or machine mine.	Total tons.
12 13 14 15 16 17 18 19 20 21	Ill. Midland C. Co., Victor. Jones & Adams C. Co., No. 1. Madison C. Corp., No. 1. Springfield C. M. Co., No. 5 Ill. Midland C. Co., Peabody. Woodside C. Co., Woodside. Black Diamond C. Co., No. 1. Capitol Coal Co., Capitol. Coal Co., Capitol. Coal Co., Co. Coal Co., Co. Coal Co., Co. Coal Co., No. 2. Sangamon Coal Co., No. 2. Sangamon Coal Co., No. 2. West End Coal Co., Selbytonig field Coop. C. Co., No. 1. Williamsville C. Co., Selbytown Wabash Coal Co., No. 1.	Diverion Springfield Sherman Springfield Aubum Springfield do do do do do do do Springfield Selbytown Dawson Springfield	240 323 245 318 250 201 250 240 250 220 269 220 150 215 249 240 269 240 269 240 250 250 250 250 250 250 250 250 250 25	7.11 5.9 7.66 5.9 8.0 5.9 5.9 5.9 6.0 5.9 5.9 5.9 5.9 5.9 5.9 5.9 5.9 5.9 5.9	5 6 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5	do do do do do do do do	do do do do do do do do	dododododododod	Cable	Hddodo Mae Hddo	382,540 360,906 354,902 348,930 340,531 315,627 285,643 212,206 217,216 198,197 197,195 164,897 150,091 141,451 136,618 100,256 101,118 96,700 96,329 93,838
222 232 242 252 262 272 283 303 313 323 334 353	Spring Creek C. Co., Spring Creek	.do	178 213 210 250 250 220 268 250 238 300 200 190 120 90	5.9 5.9 5.9 5.9 5.9 5.9 5.9 5.9 5.9 5.9	5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5	dodododododododo.	do	. do. . do.	do do Cable Motor Mule. do do do do do	do do do do do do do do do do do	88, 361 86, 924 81, 539 79, 882 68, 518 67, 688 64, 609 57, 780 44, 848 3,083 54, 798 13, 864 5, 400 1, 393 906

SCHUYLER COUNTY.

- 1			1						1	1	
	Bert Kerr, No. I			5.6		Sh	Ho.	PR.	Hd	Hd	5,850
2	C. L. Devítt, No. 1	do	35	5.6	5	Sl	Hd.	do	do	do	1,203
3	Walter Wyne, No. 1	Vermont	60	2.8	2	Dr.	do	do.,	do	do	1,050
4	Joseph R. Thompson, No. 1	Rushville	40	5.6	5	do	do	do	do	do	801
5	Ray Tile Works, No. 1	Day	50	2.4	2	do	Ho.	do	do	do	860
6	Carle & Spillers, No. 1	Fredrick	30	2.4	2	do	Hd.	do	do	do	720
- 7	W. M. Cumming, No. 1	Rushville	45	5.6	5	do	do	do	do	do	
- 8	Frank Vogler, No. 1	Birmingham	45	2.6	2	do.	do	do	do	do	320
9	Ralph Strong, No. 1	Pleasant View .	40	5.6	5	do	do	do	do	do	300
10	Ralph Strong, No. 2	do	45	5.6	5	do	do	do	do	do	280
11	O. A. Dodds, No. 1	Fredrick	40	2.4	2	do	do	do	do	do	240
12	E. E. Vogler, No. 1	Birmingham	45	2.6	2	do	do	do	do	do	108
13	Chas. Foster, No. 1	Pleasant View.	30	5.6	5	do	do	do	do	do	150
	Total—13 mines										12,582
				Ι.					i	1	

SCOTT COUNTY.

					De	serip	tion	of Plan	ıt.			
Number.	Name of Operator.	Postoffice address of the mines, or near- est postoffice.	Depth of coal—feet and inches.	Thickness of seam— feet and inches.	Geological number of seam.	Shaft, slope or drift.	Hoisting-steam, horse or hand.	Long wall or pillar and room.	Haulage—motor, mule, cable, hand.	Hand or machine mine.	Total tons.	
1 2 3	McLaughlin M. Co., No. 1 John McGuire, No. 1 James A. Jones, No. 1	Alseydo	75 60 65	$\frac{2.6}{2.6}$	1 I	Dr.	11d. do	PR. do	do	do	1,24 80 70	
5	Ben & Josh Hempworth, No. 1 Walter Armitage, No. 1	Exeter	60	$\frac{2.6}{2.6}$	1	do	do	do	do	do	63 56	
5	Geo. Sellers, No. 1 Pat. McGuire, No. 1 R. T. Brown, No. 1	Winchester	28 50	2.6				do			41 40	
8	R. T. Brown, No. I Ed. Ranft, No. I	Exeter	60 55	2.6		do	do	do	do	do	36 19	
	Total—9 mines										5,31	

SHELBY COUNTY.

	Century C. Co., No. 1				Sh. St				97,885
2	Mow, C. & M. Mfg, Co., No. I.	Moweaqua	 5.0	5 d	lo do	do	Motor	do	45,982
3	B. F. Stretch	Shelbyville	 2.0	16 d	lo., do.,	do	Mule.	do	3,246
	D. Domas								
5	Wm. Baum	do	 2.0	16 S	Sh., St.,	do	do	do	2,600
6	John O'Brien	do	 2.0	16 d	lo do	do	do	do	1,440
									4.4.000
	Total —6 mines		 						154,393

STARK COUNTY.

2 3 4 5	James Higbee, No. 1	Elmira	80 124 Dr.	4.6 5.0 4.6 4.6	6 6	do do do. Dr.	Ho. do St Hd.	do do do	do do do	Hd do do do	7,642 3,800 1,900
	Total—6 mines										28,061

ST. CLAIR COUNTY.

		1	
1 St. L. & O'Fallon C. Co., No 2 Caseyville	. 192 6.0	6 Sh. St. PR. Motor Mac.	531,298
2 Consolidated C. Co., No. 17 Collinsville	. 236 7.0	6 do. do do. Mule do.	408,073
3 St. L. & O'Fallon C. Co., No. 1 Caseyville		6 do. do do. Motor Hd	272,443
4 Prairie C. Co., Praire Mine: Belleville		6 do. dodo. Muledo.	227,055
5 Breese-Trenton C. Co., W. M. Trenton	- 200 5.0		195,077
6 Jos. Taylor C. Co., St. Ellen O'Fallon	210 7.0		168,344
7 Royal C. M. Co Belleville	- 190 7.0	6 do. do do. Mule do.	166,595
8 Southern C. & M. Co , No. 8 Shiloh	200 6.0	6 dodo do Mac	157,566
9 Bessemer W. C.Co., Oak Ridge Marissa	175 6.0		152.43a
10 Superior C. & M. Co., Sup Belleville	. 186 6.0		117,734
11 Suburban C. & M. Co., Subdo			105,685
12 Fulleston C. Co., Fullestondo	- 160 7.0	6 dododododo	89,699
13 Southern C. & M. Co., No. 7 do	- 180 6.0	6 do. dododo. Mac.	78,175
14 Jos. Taylor C. Co., R. Prairie O'Fallon	. 210 7.0	6 do. do. do. Motor Hd	77,991

ST. CLAIR COUNTY-Concluded.

					De	serip	tion	of Plan	t.		
Number.	Name of Operator.	Postoffice address of the mines, or near- est postoffice.	Depth of coal—feet and inches.	Thickness of seam— feet and inches.	Geological number of seam.	Shaft, slope or drift.	Hoisting—steam, horse or hand.	Long wall or pillar and room.	Haulage—motor, mule, cable, hand.	Hand or machine mine.	Total tons.
155 166 171 188 199 200 221 222 233 24 225 226 227 288 334 335 336 367 37 388 39 400 411 422 433 445 446 477 488 489 500 551 552 553 566 662 663 664	Jos. Taylor C. Co., Taylor Kolb Coal Co. Con. C. Co., Green Nut. Jones Bros. C. & M. Co., No. 1 Borders C. Co., No. 1 Bessemer W. C. C., Fairbank Little C. Co., No. 2 Border C. Co., No. 2 Wilharmile C. Co., Kuby Johnson C. Co., O. K. Border C. Co., No. 2 Wilharmile C. & C. Co. Inter. C. & M. Co., Randle Kolb C. Co., Vinegar Hill Central Ind. C. M. Co., Enter White & Son, No. 2 Bowey C. Co., Wongar Hill Central Ind. C. M. Co., Co., Fairbank Mo. & Hl. C. Co., Rentehler White & Son, Co., Garriside Sumiliant C. C. M. Co., Wilderman South C. C. M. Co., Wilderman South C. & M. Co., Oxalsand Mo. & Hl. C. Co., Richland Southern C. & M. Co., No. 5 Mo. & Hl. C. Co., St. Clair Harmony C. Co. Rub C. Co., Valley Frank Sergent Towet Grove Coal Co. Will Lattman Co. Operative Coal Co. Lebanon City Co	Mascoutah Mascoutah Belleville Marissa do Lemburg Lemburg Belleville O'Fallon Belleville O'Fallon Belleville O'Fallon Belleville O'Fallon Belleville O'Fallon Marissa do Ado Freeburg Belleville do do do do Belleville do do do Marissa Belleville do do do Marissa Belleville do	150 150 160 180 180 191 125 210 190 180 191 125 210 190 120 190 120 120 120 120 120 120 120 120 120 12	7.00 7.00 7.00 7.00 7.00 7.00 7.00 7.00	66 66 66 66 66 66 66 66 66 66 66 66 66	Sh do S6 Sdo	PR do	Mule. Motor Mule	Maedo Mae Hd	4,524 3,216 2,820 2,051 1,810 502 212 140	
	Total—72 mines			.	.		-	-	1		4,184,555

TAZEWELL COUNTY.

-					De	scrip	tion	of Plan	ıt.		
Number.	Name of Operator,	Postoffice address of the mines, or near- est postoffice.	Depth of coal—feet and inches.	Thickness of seam— feet and inches.	Geological number of seam.	Shatt, slope or drift.	Hoisting—steam, horse or hand.	Long wall or pillar and room.	Haulage—motor, mule, cable, hand.	Hand or machine mine.	Total tons.
2 3 4 5 6 7 8	Tazewell Co. C. Co. Eastern Coal Co. Grant Bros. Champion Coal Co. Phoenix Coal Co. A. Cummings. Cummings Bros. & Co. Marion Marteness. G. Gidrelhousen & Son. Total—9 mines.	Peoria	90 100 80 100 100 22	4.6 4.6 4.6 4.6 4.6 4.6	5 5 5 5 5 5 5	do do do do do do	do do do do do do do	PR do	do do do do do	Hddodododododo .	61,287 23,000 19,947 18,406 8,557 13,047 9,600 7,000 6,342

VERMILION COUNTY.

Bunsen C. Co., Vermilion. Georgetown. 7.0 6 Sh. St. R P. Motor Hd.	
Brizaril Block C. Co., No. 3. Steelfon 7.0 6 do. d	505,519
3 Bunsen C. Co., No. 4. Georgetown. 7.0 6 do.	302,89
4 Brazil Block C. Co., No. 2. Westville 7.0 6 do. do. do. do. do. do. 5 Electric C. Co., Electric Danville 6.0 7 do. do. do. Cable do. Motor do. S Tilton C. Co., Star. Danville 6.0 7 do. do. do. Motor do. S Tilton C. Co., Star. Danville 6.0 7 do. do. do. do. Motor do. Danville Co. Cable do. Cabl	
5 Electric C. Co., Electric Danville 6.0 7 (do. do. do. do. do. do. do. Gable do. 6 Brazil Block C. Co., No. 44 Westville 6.0 7 (do. do.	201.03
6 Brazil Block C. Co, No. 44. Westville 6.0 7 do. do. do. Motor .do. 7 E. S. Gray C. Co, Grays. Missionfield 6.0 6 do. do. do. Mule .do. 8 Tilton C. Co, Star . Danville 6.0 7 do. do. dododo. 9 Bunsen C. Co, No. 2do. 7.0 6 do. dododododo. 10 Danville Col. Co, S. Catlin	183,90
7 F. S. Gray C. Co., Grays.	170,24
STILON C. Co., Star Danville 6.0 7 do. do. do. do. do. do. 9 Bunsen C. Co., No. 2 do. 7.0 6 do. do. do. Motor do.	125,52
9 Bunsen C. Co., No. 2do	74,85
0 Danyille Col Co, Catlin. Catlin. 6.0 7 do. do. do. dol. dol. do. dol. dol. Brazil Block C. Co, No. Steelon. 7.0 6 do. dol. dol	64,86
11 Brazil Block C. Co, No. 4 Steelton 7.0 6 do. do. do. do. do. do. do. 3 do. do. 3 do. do. 3 do. do. 3 do. 4 do. 3 do. 4 do	57,82
22 Bunsen Coal Co., No. 5. Danville	44,46
33 Bushong Bros., Minnee Minneie 6,0 7 (do. do. -do. Mule -do. 45 (outh O & Mayood C C C O O & Moveod 6,0 7 (do. do. -do. -do. -do. 5 (Reiley & Doughty Danville 6,0 7 (do. do. -do. -	43,99
South Oakwood C. Co. Oakwood 6.0 7 do. do. do. do. do. do. 15 Reiley & Doughty Danville 6.0 7 do. do. do. do. do. do. 16 Danville Consummers C. Co. do 6.0 7 do. do. do. do. do. do. 17 J. W. Mauck do.	33,92
15 Refley & Doughty Danville 6.0 7 do. do. .do. .do	15,84
	7,69
7 J. W. Manck do	68,67
S John Olsen	26,78
	16,000
	12,98
[9] SHATOH C. & D. CO	12,94
20 Wm, J. Watkins Danville 6.0 7 dododododo	7,700
on Olsen Bros	6,500
22 Wm. C. Schafer Danville 6,0 7 do. do. do. do. do. do.	6,000
23 D. A. Jenkinsdodo6.0 7 do dodododo	5,91
24 W. F. Crawford & Son Collison 5.0 7 do dodododo	5,000
5 L. S. Miller	5,000
26 Geo. H. Haskins Grape Creek 7.0 6 dododododo	4,77
James Thomas & Sons Danville 6.0 7 do. do. do. do. do. do.	3,700
Bushony & Walker Catlin 6.0 7 do . do do do do do	3,279
Pairmount 6.0 7 do. do. do. do. do. do.	2,970
0 J. W. Ervin Danville 6,0 7 do. do. do. do. do. do.	2,65
Henry Wonderlin 6.0 7 do eododo do	2,700
2 S. M. Hodges & Son	2,000
3 Crawford Bros Oakwood 6.0 7 do do	1,789
M. C. Wilkinson Danville 6.0 7 do. dodododo.	1,500
35 John Alderidgedo	SU
San Samuel Thomas Catlin 6.0 7 do. do do do do.	613
37 David C. Jonesdo	29
38 Ed. Siddell	28
John Maria Maria	
Total—38 mines.	
	2,033,46

WARREN COUNTY.

					Des	scrip	tion	of Plan	t.		
Number.	Name of Operator.	Postoffice address or the mines, or near- est postoffice.	Depth of coal—feet and inches.	Thickness of seam— fect and inches.	Geological number of seams.	Shaft, slope or drift.	Hoisting—steam, horse, or hand.	Long wall or pillar and 100m.	Haulage - motor, mule, cable, hand.	Hand or machine mine.	Total ° tons.
8 9 10	H. J. Rohr Simcox Bros Simcox Bros Willis Clayton F. R. Kennedy Manuel & Wallingford Lon Begner August Von Ach H. L. Chatterton Thos. Caldwell D. Hartman J. G. Lee Wm. Ruhl	-do Avon Moumouth Roseville -do -do Monmouth Avon -do Youngstown Avon	56 40 40	3.6 2.0 2.0 2.0 2.0 2.0 2.0 2.0 2.0 2.0 2.0	1 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	do Dr. Sh Dr. Sh do Dr. do	do Hd. Ga do Hd. do Ga	- do	Hddodododododododododododododo	. do	3,000 2,535 1,200 1,000 680 615 600 280 280 240 140
	Total—12 mines										10,670

WASHINGTON COUNTY.

2	Kuhn Coal Co Finke Harris C. Co Fanke & Gussman	Nashville	425	6	do	do	do	Mule.	do	
	Total—3 mines			 						24,827

WHITE COUNTY.

1	Norris City Coal Co					
	Total—1 mine	 	 	 	 	 23,780

WILL COUNTY.

1 Wilm. C. M. & M. Co., No. 6 2 Mnrphy Linskey & Kasher, No. 4	Braidwood	55	3.0 3.0 3.0	2	do	do	do	Hd	
Total—3 mines								 	140,583

WILLIAMSON COUNTY.

			Description of Plant					nt.			
Number.	Name of Operator.	Postoffice address of the mines, or near- est postoffice.	Depth of coal-feet and inches.	Thickness of seam— feet and inches.	Geological number of seam.	1	Hoisting—steam, horse or hand.	Long wall or pillar and room.	Haulage—motor, mule, cable, hand.	Hand or machine mine.	Total tons.
1 2 2 3 3 4 5 6 6 7 8 8 9 100 111 113 11 15 6 117 11 18 8 9 100 111 11 13 11 11 15 11 11 11 11 11 11 11 11 11 11	Big Muddy C. & I. Co., No. 1. Peabody C. Co., No. 1. Chi & Car C. Co., No. 1. Carterville Dist C. Co., No. 1. Carterville C. Co., Burr City Western C. & M. Co., No. 1. Williamson Co. Coal Co. Chi & Car C. Co., No. 8. St. LCarterville C. Co., Dale Hafer W. C. Co., No. 8. St. LCarterville C. Co., Dale Hafer W. Co., No. 2. St. H. C. & C. Co., Hemiock. Peabody C. Co., No. 2. St. H. C. & C. Co., Hemiock. Peabody C. Co., No. 2. St. H. C. & C. Co., Co., No. 2. Cart. & B. M. C. Co., John. Carterville & Herrin C. Co., Je W. Va. C. Co., No. 1. Donally-Koenneck C. Co., DK Robert Dick Coal Co. Taylor Coal Co., No. 1. Taylor Coal Co., No. 1. Taylor Coal Co., No. 2. Standard Col. Co., No. 2. Standard Col. Co., No. 2. Standard Col. Co., No. 2. Big Muddy F. Co., No. 2. Big Muddy F. Co., No. 2. Seystone B. M. C. Co. J. S. Mexell Binkley Mills Co. Reace Carlyor Gifford Price. Binkley Mills Co. Reace Carlyor & Co. Binkley Mills Co. Reace Taylor & Co. L. A. Woodbridge E. E. Rentifo. C. D. Roberson. D. Hill. M. Shaw. Joe Porden.	Jonnston City Marion. Herrin .do	907 157 108 108 109 109 109 109 109 109 109 109 109 109	9.0 9.0 9.0 9.0 9.0 9.0 9.0 9.0		Sh do do do do do do do d	St do	P-R. do. do. do. do. do. do. do. do. do. do	Motor Mule. Ado. Ado. Motor Mule. Ado. Ado. Motor Mule. Ado. Ado. Ado. Ado. Ado. Motor Mule. Ado. Ado. Ado. Motor Mule. Ado. Ado. Motor Mule. Ado. Ado. Motor Mule. Ado. Ado. Motor Mule. Ado. Ado. Ado. Ado. Mule. Ado. Ado. Ado. Ado. Ado. Ado. Ado. Ado	1 1	492,754 492,754 492,754 495,559 387,248 373,299 387,299 387,299 387,69
55	Total—55 mines										5,908,544

Table 77—Concluded.

WOODFORD COUNTY.

					De	scrip	tion	of Plan	nt.		
Number.	Name of Operator	Postoffice address of the mines, or near- est postoffice.	Depth of coal—feet and inches.	Thickness of seam— feet and inches.	Geological number of seam.	Shaft, slope or drift.	Hoisting—steam, horse or hand.	Long wall or pillar and room.	Haulage—motor, mules, cable, hand.	Hand or machine mine.	Total tons.
1 2	Roanoke Coal Co	Roanoke Minonk		2.6	2 2	Sh do	St do	L. W.	Mule.	Hd . do	113,473 56,762 170,235

Table 78 is a recapitulation of Table 77, and is arranged by the geological number of the several seams of coal.

Table 78—Summary of the Physical Character of the Coal Mines of the State, Geological Number of Seams, Manner of Working, Kind of Openings and Tons Produced—1910.

		N1	Mann	er of Wo	rking.	Charac	ter of Op	ening.		
Geological Number of Seam.	Number of counties.	Number of mines.	Long wall.	Pillar and room.	Strip.	Shaft.	Slope.	Drift.	Tons,	
1	9	66		66		32	7	27	461,827	
1 and 2	1	1	1			1			60,781	
2	20	148	20	128		72	12	64	4,808,433	
2 and 5	1	1	1			1			88,000	
3	1	2		2		1	1		6,720	
5	16,	239		237	2	115	25	99	11,170,415	
6	31	356		355	1	293	30	33	29,778,674	
6 and 7	1	1		1		1			8,368	
7	11	63	2	61		51	2	10	2,324,109	
16	1	4		4		4			10,526	
Total		881	24	854	3	571	77	233	48,717,853	

FATAL ACCIDENTS.

Table 79 presents, by districts, the number of fatal accidents occurring in and around the coal mines of the State during the past year. The total number of fatal accidents for the year was 406. This is 193 more killed than reported for last year. The large increase was caused by the appalling loss of human life in the coal mine at Cherry, Ill., where 256 miners lost their lives—this mine being located in the second district—brought the total killed in that district to 266.

Table 79—Fatal Casualties by Districts for the Year Ended June 30, 1910.

			iere loyed.	I	Employé:	S.	Total	loyed to	,000 em-	Num- ber
Districts.	Killed.	Under ground.	Above ground.	Under ground.	Above ground.	Total.	Total tons of coal mined.	Number employed to each death.	Rate per 1,0 ployed.	of tons of coal to each death.
First	8	s		6,813	599	7,412	3,018,246	927	1.1	377,251
Second	266	265	1	8,246	705	8,951	3,880,765	34	29.7	14,589
Third	7	6	1	4,942	546	5,488	2,815,979	784	1,3	402,283
Fourth	9	8	1	6,729	526	7,255	5,210,662	806	1.2	578,962
Fifth	20	20		5,963	507	6,470	3,776,768	324	3.1	188,838
Sixth	6	6		6,560	586	7,146	5,862,508	1,191	0.8	977,085
Seventh	22	19	3	6,643	604	7,247	5,913,722	329	3.0	268,805
Eighth	16	15	1	5,824	513	6,337	5,031,524	396	2.5	314,470
Ninth	29	27	2	8,550	810	9,360	6,632,666	323	3.1	228,712
Tenth	23	21	2	8,090	878	8,968	6,575,013	390	2.6	285,870
The State	406	395	11	68,360	6,274	74,634	48,717,853	184	5.4	119,997

Table 80 shows the fatal accidents for a series of twenty-eight years; also the total number employed, and the number of tons of coal produced, with average number of men employed to each life lost, the ratio per 1,000, and the average tons of coal mined to each man killed. During these twenty-eight years, 3,026 men have lost their lives in the coal mines of the State; this is an average of 108 men killed each year. The number of employés to each life lost, and the number of tons mined to each life lost, is less this year than in any year since 1883; this is largely due to the Cherry mine accident.

Table 80—Fatal Accidents for Twenty-eight Years.

Year.	Number killed.	Total number of employés.	Total tons of coal mined.	Number of employés to each life lost.	Ratio per 1,000.	Number of tons of coal produced to each life lost.
1883	134	23,939	12,123,456	179.6	5,6	90,474
1884	46	25,575	12,208,075	566 .	1.8	265,393
1885	39	25,946	11,834,459	652.4	1.5	303,448
1886	52	25,846	11,175,241	497	2.0	214,909
1887	. 41	26,804	12,423,066	654	1.5	303,002
1888	55	29,410	14,328,181	534.7	1.9	260, 512
1889	42	30,076	14,017,298	716,1	1.4	333,745
1890	53	28,574	15,274,727	539.1	1.9	288,203
1891	60	32,951	15,660,698	549	1,8	261,012
1892	57	33,632	17,862,276	590	1.7	313,372
1893	69	35,390	19,949,564	513	1.9	289,124
1894	72	38,477	17,113,576	534	2.2	23,,688
1895	75	38,630	17,735,864	515	2.3	236, 478
1896	77	37,057	19,786,626	481	2.3	256,969
1897	69	33,788	20,072,758	489.7	2,0	290,910
1898	75	35,026	18,599,299	467	2,1	247,991
1899	84	36,991	23,434,445	440	2,3	278,982
1900	94	39,384	25, 153, 929	419	2.4	267,595
1901	99	44,143	26, 635, 319	445.9	2,2	269,044
1902	99	46,005	30,021,300	464.7	2.2	303,245
1903	156	49,814	34,955,400	319.3	3,1	224,073
1904	157	54,774	37,077,897	348,9	2.9	256,165
1905	199	59,230	37,183,374	298	3,4	186,851
1906	155	62,283	38,317,581	402	2.5	247,210
1907	165	66,714	47,798,621	404	2,5	289,689
1908	183	70,841	49,272,452	387	2.6	269,248
1909	213	72,733	49,163,710	341.5	2,9	230,816
1910	406	74,634	48,717,853	183.8	5.4	119,997
Average 28 years	108	42,095	24,924,894	389,4	2,6	230, 557

Table 81 gives the averages of the number of men killed, number of men employed and tons mined for a series of nine years—1883 to 1891, inclusive—and also the averages for the succeeding nineteen years, with the proportion of men employed and tons mined to each death and the ratio of deaths to each 1,000 employed.

Table 81—Fatal Accidents, Averages and Proportions for Nine Years, 1883-1891, and for the Succeeding Nineteen Years, 1892-1910.

		Average		Proport	tion of—	Ratio
Number of Years,	Killed.	Employés.	Tons mined.	Employés to each life lost.	Tons to each life lost.	per 1,000.
9 years	58	27,623	13, 227, 245	476.3	208,899	2,1
10 years	58	28,224	13,610,748	487.5	235,073	2.1
11 years	59	28,876	14,187,004	490,2	240,829	2,0
12 years	60	29,189	14,430,885	486.5	240,515	2.1
13 years	61	29,402	14,685,114	481	240,134	2.1
14 years	62	29,663	15,049,508	464,8	241,621	2.1
15 years	63	29,938	15,384,391	479	245,235	2.1
16 years	64	30,256	15,585,323	476.5	245,438	2.1
17 years	65	30,652	16,047,036	473.7	248,000	2.1
18 years	66	31,137	16, 552, 974	469.4	249,568	2.1
19 years	68	31,822	17,083,624	467.6	251,035	2.1
20 years	70	32, 531	17,730,508	467.4	254,748	2.1
21 years	74	33,354	18, 550, 741	452.5	251,657	2.2
22 years	78	34, 328	19,392,884	442.9	250,231	2.3
23 years	83	35,410	20, 166, 384	427.8	243,607	2.3
24 years	86	36, 530	20,922,767	425	243,288	2.4
25 years	89	37,737	21,997,733	424	247,277	2.3
26 years	93	39,665	23,077,519	428	249,279	2.3
27 years	97	40,890	24,043,674	421	247,778	2.4
28 years	108	42,095	24,924,894	389.4	230,557	2.6

Table 82 presents, by districts, the various causes resulting in the death of the 406 men who lost their lives in the coal mines during the past year. This list enumerates twenty-five causes responsible for the whole number of deaths. It is shown that mine fire caused the death of 256 men in the second district, this being 63.04 per cent of the whole number killed, these being all killed in the Cherry mine disaster. Falling clod, rock and roof caused the next largest number of deaths, being thirty-one killed.

Table 82—Fatal Accidents by Causes for 1910, by Districts, with Percentages.

ber.		m-4-1-					Dist	tricts					Per-
Number.	Causes.	Totals.	1st	2d	3d	4th	5th	6th	7th	sth	9th	10th	cent- ages.
1	Asphyxiated (afterdamp)	4]							4		0,99
2	Blast explosion	4		1	1							2	0.99
3	Cage	6		1		2			2		1		1.48
4	Coal falling off car	1										1	0.25
5	Drive belt	1										1	0.25
6	Electrocuted	3								1	2		0.74
7	Falling clod, rock and roof	31	6	1	5		11	1	2	1	4		7,65
8	Falling coal	19		2		2	2	1	3	2	7		4.68
9	Falling slate	15					3	1		6	1	4	3,69
10	Falling steam pipe	1										1	0.25
11	Fan	2							2				0.49
12	Fell down shaft	3							1		2		0.74
13	Fell off ladder	1							1				0.25
14	Fell on rail	1		1									0.25
15	Flying coal	4	1				2					1	0.99
16	Flying lever	1								1			0.2
17	Flywheel	1								1			0.2
18	Gas explosion	16							4		3	9	3.9
19	Hot water	1							1				0.2
20	Mine fire	256		256		ļ							63.0
21	Mule, kicked by	2						1		1			0.49
22	Pit car	21	1			3	1	2	4	2	4	4	5.17
23	Powder explosion	. 7		4		2	1						1.75
24	Premature blast	. 2								1	1		0.49
25	Railroad car	. 3			1				2				0.7
	Total	406	8	266	7	9	20	6	22	16	29	23	100.0

Table 83 presents the fatal accidents in the coal mines of the State for a series of twenty-three years. These fatalities are arranged under seven leading causes, and a class styled as other causes. This table also gives the percentages of deaths caused by leading causes and other causes, and also percentages of deaths caused by each leading cause for twenty-three years.

Table 83—Fatal Accidents for Twenty-three Years, by Leading Causes.

					Lead	ing Cau	ises.				Oth Caus	er es.
Years.	Totals.	Blastsandexplo- sions.	Cages.	Falling coal, rock and roof.	Falling down shaft.	Fire, black and white damp.	Pit cars.	Railway cars.	Total.	Percentages.	Total.	Percentages.
1888	55	9	2	33	4		6	1	55	0.001		
1889	42	3	4	26	2		5		40	95.2	2	4.8
1890	53	4	4	36		5	3	1	53	100.6		
1891	60	11	4	33	1	4	2	2	57	95.0	3	5.0
1892	57	4	4	28	8	3	6	1	54	94.7	3	5.3
1893	69	6	4	48	3	2	2	1	66	95.7	3	4.3
1894	72	8	0	43	5		6	2	72	100.001		
1895	75	12	4	38	4	5	5	1	69	92.0	6	8.0
1896	77	9	5	41	6	2	7	1	71	92.2	6	7.8
1897	69	11		46	5	2	1	1	66	95.7	3	4.3
1898	75	11	2	43	4	7	2	1	70	93.3	5	6.7
1899	84	4	5	51	4	4	6	1	75	89.3	9	10.7
1900	94	17	4	51	1	1	11	2	87	92.6	7	7.4
1901	99	3	1	57	1	1	11		74	74.7	25	23.3
1902	98	13	2	55	7		15	2	94	95.0	5	5.0
1903	156	47	6	77	2		18		150	96.2	6	3.9
1904	157	44	4	65	8		21	2	144	94.7	13	8.3
1905	199	82	6	80	4	3	10	1	186	93.5	13	6.5
1906	155	24	5	84	9		18	4	144	92.9	11	7.1
1907	165	24	8	84	6	4	28	. 4	158	95.8	7	4.2
1908	183	36	1	91	3		35	s	174	95.1	9	4.9
1909	213	69	4	84	5	4	24	8	198	93.0	15	7.0
1910	406	33	6	65	3	260	21	3	391	96.3	15	3.
Total 23 years	2,714	484	93	1,259	95	307	263	47	2,548		166	
Percentage 23 years		17.8	3.4	46.4	3.5	11.3	9.7	1.7		93.9		6.

Table 84 presents the number of deaths which have occurred in the coal mines of the State for the past ten years. For the present year the showing is by districts. The object of this presentation is to bring together primary causes resulting in the death of a large majority of the men who have been killed in coal mines. Under the head of use of powder, all fatalities have been collected, traceable in any manner to the use of this explosive. For this year the number of deaths by this cause is seventeen, this being twelve less than last year, and is less than any preceding year shown, with the exception of 1902, when the number was the same as this year. There were sixty-five deaths caused by falling coal, rock, etc., while under the heading of various causes we find a total of 287 or 70.69 per cent of all deaths; of these, 256 of the 258 of the second district were victims of that terrible disaster at Cherry, Ill.

Table 84—Fatal Accidents, Caused Primarily by Explosions of Powder, Gas Explosions, Falling Coal, Falling Rock, etc., Pit Cars and Various Causes, by Districts, for the Year 1910, and for the Nine Preceding Years.

	Са	uses—	Use of	Powde	r.	wder.	Othe	r Nan	ed Cai	ises.	Tot	als.
Districts and Years.	Blast explosions.	Blasts, premature.	Blown out charge.	Powder explosions.	Flying coal.	Totals from the use of powder	Gas explosions.	Falling coal, rock, etc.	Pit cars.	Various.	From other named causes.	From all causes.
First					1	1		6	1		7	8
Second	1			4		5		3		258	261	266
Third	1					1		5		1	6	7
Fourth				2		2		2	3	2	7	9
Fifth				1	2	3		16	1		17	20
Sixth								3	2	1	6	6
Seventh							4	5	4	9	22	22
Eighth		1				1		9	2	4	15	16
Ninth		1				1	3	12	4	9	28	29
Tenth	2				1	3	9	4	4	3	20	23
1910	4	2		7	4	17	16	65	21	287	389	406
1909	16	2		10	1	29	40	84	24	36	184	213
1908	9	4	5	8	3	29	7	91	35	21	154	183
1907	1	1	11	10	1	24	4	84	28	25	141	165
1906	4	1	2	5	10	22	2	84	18	29	133	155
1905	8	2	7	8	9	34	48	80	10	27	165	199
1904	3	16	2	14	9	44		65	21	27	113	157
1903	25	11		3	2	41	8	79	18	10	115	156
1902	2	9		3	3	17		55	15	12	82	99
1901	1	s		3	8	20	1	57	11	10	79	99
Ten years	73	56	27	71	50	277	126	744	201	484	1,555	1,832

Table 85 gives the percentages of all the causes for a series of ten years.

Table 85—Percentages of Fatal Casualties for Nine Years, 1901-1910, by Causes.

							erce	ntag	es –						
	Use of Powder.				other,	Ot	her (Caus	es.		All	Cau	ses.		
Year.	Blast exlpo- sions.	Blast, prema- ture.	Blown out charges.	Powder explo- sions.	Flying coal.	From powder, other named causes, and all causes.	Gas explosions	Falling coal, rock, etc.	Pit cars.	Various.	Blast, powder, etc.	Gas explosions	Falling rock, coal, etc.	Pit cars.	Various.
1901	5.0	40.0		15.0	40.0	100.00	1.3	72.1	13.9	12.7	20.2	1.0	57.6	11.1	10.1
1902	11.8	52.9		17.6	17.7	100.00		67.1	18,3	14.6	17.2		55.6	15.1	12.1
1903	61.0	26.8		7.3	4.9	100.00	7.0	68.7	15.6	.87	26.3	5.1	50.7	11.5	6.4
1904	6.8	36.4	4.5	31.8	20.5	100.00		57.5	18.6	23.9	28.0		41.4	13.4	17.2
1905	23.5	5.9	20.6	23.5	26.5	100.00	29.1	18.5	6.0	16.4	17.1	24.1	40.2	5.0	13.6
1906	18.2	4.5	9.1	22.7	45.5	100.00	1.5	63.2	13.5	21.8	14.2	1.3	54.2	11.6	18.7
1907	4.2	4.2	45.8	41.6	4.2	100,00	2.8	59.6	19.9	17.7	14.0	2.4	50.9	17.0	15.1
1908	31.0	13.8	17.2	27.6	10.4	100.00	4.6	59.1	22.7	13.6	15.9	3.8	49.7	19.1	11.5
1909	55.2	6.9		34.5	3.4	100.00	21.7	45.7	13.0	19.6	13.6	18.8	39.4	11.3	16.9
1910	23.5	11.8		41.2	23.5	100.00	4.3	16.7	5.4	73.6	4.2	4.2	16.0	5.1	70.5
Ten years	26.4	20.2	9.7	25.6	18.1	100.00	8.2	47.8	12.9	31.1	15.1	6.9	40.6	11.0	26.4

Table 86 presents the fatal and non-fatal accidents for the year. These are presented in parallel columns for ready comparison.

Table 86—Fatal and Non-Fatal Accidents Caused Primarity by Explosions of Powder, with Percentages, Also by Falling Coal, Rock, etc., and All Other Causes, with Percentages—1910.

	Casua	lties.	Percent	ages of—	All	Per-
Causes	Fatal.	Non-fatal.	Fatal.	Non-fatal.	casualties.	centages.
Blast explosions	4	2	23.5	7.1	6	13
Blasts—premature	2	10	11.8	35.7	12	26
Blown out charge		1		3.6	1	2
Powder explosions	7	7	41.2	25.0	14	31
Flying coal	4	8	23.5	28.6	12	26
Total	17	28	100.0	100.0	45	100
Falling coal, rock etc	65	369	16.7	51.7	434	39
All other causes	324	345	83.3	48.3	669	60
Total	389	714	100.0	100.0	1,103	100
Grand total	406	742	35.4	64.6	1,148	100

Table 87 presents the fatal accidents for a series of twenty-eight years. This table gives for each year the number of men employed and total tons produced; these are followed in parallel columns with the total number of deaths and the cause, whether from falls in mines or from other causes, with the percentages of each. The large percentage found under other causes for this year is due to the Cherry mine disaster.

Table 87—Fatal Accidents in Coal Mines, Caused by Falls in Mines and from All Other Causes; the Total Number of Men and Tons, with Percentages for Twenty-eight Years.

Pairs Pair				/D. + o.1	Cau	ses.	Percentag	ge By
1884. 25,575 12,208,076 46 29 17 63.0 1885. 25,946 11,834,459 39 20 19 51.3 1886. 29,846 11,175,241 52 32 20 61.5 1887. 26,804 12,423,666 41 28 13 68.3 1888. 29,410 14,328,181 55 33 22 60.0 1889. 30,076 14,017,298 42 26 16 61.9 1890. 28,574 15,274,727 53 36 17 67.9 1891. 32,951 15,660,698 60 33 27 55.0 1892. 33,632 17,862,276 57 28 29 49.1 1893. 35,390 19,949,564 69 48 21 69.6 1894. 38,477 17,113,576 72 43 29 59.7 1896. 37,032 19,786,626 77	Years.	Persons employed.	Total tons.	Total deaths.	Falls.		Falls.	Other causes.
1885. 25,946 11,834,459 39 20 19 51.3 1886. 29,846 11,175,241 52 32 20 61.5 1887. 26,804 12,423,666 41 28 13 68.3 1888. 29,410 14,328,181 55 33 22 60.0 1889. 30,076 14,017,298 42 26 16 61.9 1890. 28,574 15,274,727 53 36 17 67.9 1891. 32,951 15,660,698 60 33 27 55.0 1892. 33,632 17,862,276 57 28 29 49.1 1893. 35,390 19,949,564 69 48 21 69.6 1894. 38,477 17,113,576 72 43 29 59.7 1896. 37,032 19,786,626 77 41 36 53.2 1897. 33,788 20,072,758 69	1883	23,939	12,123,456	134	40	94	29.9	70.1
1886. 25,846 11,175,241 52 32 20 61.5 1887. 26,804 12,423,066 41 28 13 68.3 1888. 29,410 14,328,181 55 33 22 60.0 1889. 30,076 14,017,298 42 26 16 61.9 1890. 28,574 15,274,727 53 36 17 67.9 1891. 32,951 15,660,698 60 33 27 55.0 1892. 33,632 17,862,276 57 28 29 49.1 1896. 35,390 19,949,564 69 48 21 69.6 1894. 38,477 17,113,576 72 43 29 59.7 1896. 37,032 19,786,626 77 41 36 53.2 1897. 33,788 20,072,758 69 46 23 66.7 1898. 36,991 23,434,445 84	1884	25,575	12,208,076	46	29	17	63.0	37.0
1887. 26,804 12,423,066 41 28 13 68.3 1888. 29,410 14,328,181 55 33 22 60.0 1889. 30,076 14,017,298 42 26 16 61.9 1890. 28,574 15,274,727 53 36 17 67.9 1891. 32,951 15,660,698 60 33 27 55.0 1892. 33,632 17,862,276 57 28 29 49.1 1893. 35,390 19,949,564 69 48 21 69.6 1894. 38,477 17,113,576 72 43 29 59.7 1896. 37,032 19,786,626 77 41 36 53.2 1897. 33,788 20,072,758 69 46 23 66.7 1898. 36,991 23,434,445 84 51 33 60.7 1899. 36,991 23,434,445 84	1885	25,946	11,834,459	39	20	19	51.3	48.7
1888. 29,410 14,328,181 55 33 22 60.0 1889. 30,076 14,017,298 42 26 16 61.9 1890. 28,574 15,274,727 53 36 17 67.9 1891. 32,951 15,660,698 60 33 27 55.0 1892. 33,632 17,862,276 57 28 29 49.1 1893. 35,390 19,949,564 69 48 21 69.6 1894. 38,477 17,113,576 72 43 29 59.7 1895. 38,630 17,735,864 75 38 37 50.7 1896. 37,032 19,786,626 77 41 36 53.2 1897. 33,785 20,072,755 69 46 23 66.7 1898. 35,026 18,599,299 75 43 32 57.3 1899. 36,991 23,434,445 84	1886	25,846	11,175,241	52	32	20	61.5	38,5
1889. 30,076 14,017,298 42 26 16 61.9 1890. 28,574 15,274,727 53 36 17 67.9 1891. 32,951 15,660,698 60 33 27 55.0 1892. 33,632 17,862,276 57 28 29 49.1 1893. 35,390 19,949,564 69 48 21 69.6 1894. 38,477 17,113,576 72 43 29 59.7 1895. 38,630 17,735,864 75 38 37 50.7 1896. 37,032 19,786,626 77 41 36 53.2 1897. 33,785 20,072,755 69 46 23 66.7 1898. 35,026 18,599,299 75 43 32 57.3 1899. 36,991 23,434,445 84 51 33 60.7 1900. 39,384 25,153,929 94	1887	26,804	12,423,066	41	28	13	68.3	31.7
1890 28,574 15,274,727 53 36 17 67.9 1891 32,951 15,660,698 60 33 27 55.0 1892 33,632 17,862,276 57 28 29 49.1 1883 35,390 19,949,564 69 48 21 69.6 1894 38,477 17,113,576 72 43 29 59.7 1895 38,630 17,735,864 75 38 37 50.7 1896 37,032 19,786,626 77 41 36 53.2 1897 33,788 20,072,755 69 46 23 66.7 1898 36,991 23,434,445 84 51 33 60.7 1900 39,384 25,153,929 94 51 43 54.3 1901 44,143 26,635,319 99 57 42 57.6 1902 46,005 30,021,300 99 55 </td <td>1888</td> <td>29,410</td> <td>14,328,181</td> <td>55</td> <td>33</td> <td>22</td> <td>60.0</td> <td>40.υ</td>	1888	29,410	14,328,181	55	33	22	60.0	40.υ
1891 32,951 15,660,098 60 33 27 55.0 1892 33,632 17,862,276 57 28 29 49.1 1893 35,390 19,949,664 69 48 21 69.6 1894 38,477 17,113,576 72 43 29 59.7 1895 38,630 17,735,864 75 38 37 50.7 1896 37,032 19,786,626 77 41 36 53.2 1897 33,788 20,072,758 69 46 23 66.7 1898 35,026 18,599,299 75 43 32 57.3 1899 36,991 23,434,445 84 51 33 60.7 1900 39,384 25,153,929 94 51 43 54.3 1901 44,143 26,635,319 99 57 42 57.6 1902 46,005 30,021,300 99 55 </td <td>1889</td> <td>30,076</td> <td>14,017,298</td> <td>42</td> <td>26</td> <td>16</td> <td>61.9</td> <td>38.1</td>	1889	30,076	14,017,298	42	26	16	61.9	38.1
1892 33,632 17,862,276 57 28 29 49,1 1893 35,390 19,949,664 69 48 21 69,6 1894 38,477 17,113,576 72 43 29 59,7 1895 38,630 17,735,864 75 38 37 50,7 1896 37,032 19,786,626 77 41 36 53,2 1897 33,788 20,072,758 69 46 23 66,7 1899 35,026 18,599,299 75 43 32 57,3 1899 36,991 23,434,445 84 51 33 60,7 1900 39,384 25,153,929 94 51 43 54,3 1901 44,143 26,635,319 99 57 42 57,6 1902 46,005 30,021,300 99 55 44 55,6 1903 49,814 34,955,400 156 76<	1890	28,574	15,274,727	53	36	17	67.9	32.1
1893 35,390 19,949,564 69 48 21 69,6 1894 38,477 17,113,576 72 43 29 59,7 1895 38,630 17,735,864 75 38 37 50,7 1896 37,032 19,786,626 77 41 36 53,2 1897 33,788 20,072,758 69 46 23 66,7 1898 35,026 18,599,299 75 43 32 57,3 1899 36,991 23,434,445 84 51 33 60,7 1900 39,384 25,153,929 94 51 43 54,3 1901 44,143 26,635,319 99 57 42 57,6 1902 46,005 30,021,300 99 55 44 55,6 1903 49,814 34,955,400 156 76 80 48,7 1904 54,774 37,077,897 157 65	1891	32,951	15,660,698	60	33	27	55.0	45.0
1894. 38,477 17,113,576 72 43 29 59,7 1895. 38,630 17,735,864 75 38 37 50.7 1896. 37,032 19,786,626 77 41 36 53.2 1897. 33,788 20,072,758 69 46 23 66.7 1898. 35,026 18,599,299 75 43 32 57.3 1899. 36,991 23,434,445 84 51 33 60.7 1900. 39,384 25,153,929 94 51 43 54.3 1901. 44,143 26,635,319 99 57 42 57.6 1902. 46,005 30,021,300 99 55 44 55.6 1903. 49,814 34,955,400 156 76 80 48.7 1904. 54,774 37,077,897 157 65 92 41.4 1905. 59,230 37,183,374 199	1892	33,632	17,862,276	57	28	29	49.1	50.9
1895. 38,630 17,735,864 75 38 37 50.7 1896. 37,032 19,786,626 77 41 36 53.2 1897. 33,783 20,072,758 69 46 23 66.7 1898. 35,026 18,599,299 75 43 32 57.3 1899. 36,991 23,434,445 84 51 33 60.7 1900. 39,384 25,153,929 94 51 43 54.3 1901. 44,143 26,633,319 99 57 42 57.6 1902. 46,005 30,021,300 99 55 44 55.6 1903. 49,814 34,955,400 156 76 80 48.7 1904. 54,774 37,077,897 157 65 92 41.4 1905. 59,230 37,183,374 199 80 119 40.2 1906. 52,283 38,317,581 155	1893	35,390	19,949,564	69	48	21	69.6	30.4
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	1894	38,477	17,113,576	72	43	29	59.7	40.3
1897. 33,78S 20,072,75S 69 46 23 66,7 1898. 35,026 18,599,299 75 43 32 57,3 1899. 36,991 23,434,445 84 51 33 60,7 1900. 39,384 25,153,929 94 51 43 54,3 1901. 44,143 26,635,319 99 57 42 57,6 1902. 46,005 30,021,300 99 55 44 55,6 1903. 49,814 34,955,400 156 76 80 48,7 1904. 54,774 37,077,897 157 65 92 41,4 1905. 59,230 37,183,374 199 80 119 40,2 1906. 62,283 38,317,581 155 84 71 54,2 1907. 66,714 47,798,621 165 84 81 50,9 1908. 70,841 49,272,452 183 <td>1895</td> <td>38,630</td> <td>17,735,864</td> <td>75</td> <td>38</td> <td>37</td> <td>50.7</td> <td>49.3</td>	1895	38,630	17,735,864	75	38	37	50.7	49.3
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	1896	37,032	19,786,626	77	41	36	53.2	46.8
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	1897	33,788	20,072,758	69	46	23	66.7	33.3
1900 39,384 25,153,929 94 51 43 54.3 1901 44,143 26,635,319 99 57 42 57.6 1902 46,005 30,021,300 99 55 44 55.6 1903 49,814 34,955,400 156 76 80 48.7 1904 54,774 37,077,897 157 65 92 41.4 1905 59,230 37,183,374 199 80 119 40.2 1906 62,283 38,317,581 155 84 71 54.2 1907 66,714 47,798,621 165 84 81 50.9 1908 70,841 49,272,452 183 91 92 49.7 1909 72,733 49,163,710 213 84 129 39.4 1910 74,634 48,717,853 406 65 341 16.0 Total 697,897,045 3,026 1,407	1898	35,026	18,599,299	75	43	32	57.3	42.7
1901 44,143 26,635,319 99 57 42 57.6 1902 46,005 30,021,300 99 55 44 55.6 1903 49,814 34,955,400 156 76 80 48.7 1904 54,774 37,077,897 157 65 92 41.4 1905 59,230 37,183,374 199 80 119 40.2 1906 62,283 38,317,581 155 84 71 54.2 1907 66,714 47,798,621 165 84 81 50.9 1908 70,841 49,272,452 183 91 92 49.7 1909 72,733 49,163,710 213 84 129 39.4 1910 74,634 48,717,853 406 65 341 16.0 Total 697,897,045 3,026 1,407 1,619 46.5	1899	36,991	23, 434, 445	84	51	33	60.7	39.3
1902 46,005 30,021,300 99 55 44 55.6 1903 49,814 34,955,400 156 76 80 48.7 1904 54,774 37,077,897 157 65 92 41.4 1905 59,230 37,183,374 199 80 119 40.2 1906 62,283 38,317,581 155 84 71 54.2 1907 66,714 47,798,621 165 84 81 50.9 1908 70,841 49,272,452 183 91 92 49.7 1909 72,733 49,163,710 213 84 129 39.4 1910 74,634 48,717,853 406 65 341 16.0 Total 697,897,045 3,026 1,407 1,619 46.5	1900	39,384	25, 153, 929	94	51	43	54.3	45.7
1903 49,814 34,955,400 156 76 80 48.7 1904 54,774 37,077,897 157 65 92 41,4 1905 59,230 37,183,374 199 80 119 40,2 1906 62,283 38,317,681 155 84 71 54,2 1907 66,714 47,798,621 165 84 81 50.9 1908 70,841 49,272,452 183 91 92 49.7 1909 72,733 49,163,710 213 84 129 39.4 1910 74,634 48,717,853 406 65 341 16.0 Total 697,897,045 3,026 1,407 1,619 46.5	1901	44,143	26,635,319	99	57	42	57.6	42.4
1904 54,774 37,077,897 157 65 92 41,4 1905 59,230 37,183,374 199 80 119 40,2 1906 62,283 38,317,581 155 84 71 54,2 1907 66,714 47,798,621 165 84 81 50.9 1908 70,841 49,272,452 183 91 92 49.7 1909 72,733 49,163,710 213 84 129 39,4 1910 74,634 48,717,853 406 65 341 16.0 Total 697,897,045 3,026 1,407 1,619 46.5	1902	46,005	30,021,300	99	55	44	55.6	44.4
1905. 59,230 37,183,374 199 80 119 40,2 1906. 62,283 38,317,581 155 84 71 54,2 1907. 66,714 47,798,621 165 84 81 50.9 1908. 70,841 49,272,452 183 91 92 49,7 1909. 72,733 49,163,710 213 84 129 39,4 1910. 74,634 48,717,853 406 65 341 16.0 Total 697,897,045 3,026 1,407 1,619 46.5	1903	49,814	34,955,400	156	76	80	48.7	51.3
1906. 62, 283 38, 317, 581 155 84 71 54, 2 1907. 66, 714 47, 798, 621 165 84 81 50, 9 1908. 70, 841 49, 272, 452 183 91 92 49, 7 1909. 72, 733 49, 163, 710 213 84 129 39, 4 1910. 74, 634 48, 717, 853 406 65 341 16, 0 Total 697, 897, 045 3,026 1,407 1,619 46, 5	1904	54,774	37,077,897	157	65	92	41.4	58.6
1907 66,714 47,798,621 165 84 81 50.9 1908 70,841 49,272,452 183 91 92 49.7 1909 72,733 49,163,710 213 84 129 39.4 1910 74,634 48,717,853 406 65 341 16.0 Total 697,897,045 3,026 1,407 1,619 46.5	1905	59,230	37,183,374	199	80	119	40.2	59.8
1908 70,841 49,272,452 183 91 92 49.7 1909 72,733 49,163,710 213 84 129 39.4 1910 74,634 48,717,853 406 65 341 16.0 Total 697,897,045 3,026 1,407 1,619 46.5	1906	62,283	38,317,581	155	84	71	54.2	45.8
1909. 72,733 49,163,710 213 84 129 39.4 1910. 74,634 48,717,853 406 65 341 16.0 Total 697,897,045 3,026 1,407 1,619 46.5	1907	66,714	47,798,621	165	84	81	50.9	49.1
1909. 72,733 49,163,710 213 84 129 39,4 1910. 74,634 48,717,853 406 65 341 16.0 Total 697,897,048 3,026 1,407 1,619 46.5	1908	70,841	49, 272, 452	183	91	92	49.7	50.8
Total 697,897,045 3,026 1,407 1,619 46.5	1909			213	84	129	39,4	60.6
	1910	74,634	48,717,853	406	65	341	16.0	84.0
ATTOROGO 00 TEORES 40 005 04 004 004 100 50	Total		697,897,045	3,026	1,407	1,619	46.5	53.5
A verage 26 years 42,095 24,924,894 108 50 58	Average-28 years	42,095	24,924,894	108	50	58		

Table 88 gives a list of the occupations of the persons killed, with their conjugal relationship. Drivers and miners comprise 77.09 per cent of the total number killed.

Of the total number killed, 254, or 62.56 per cent, were married men. There were 912 persons left dependents by deaths caused in the mines of the State. The accident at the Cherry mine, where 256 men were killed, caused the large number of deaths for this year.

Table 88—Occupation and Conjugal Relations of Men Killed at the Mines for the Year 1910.

				Conjug	gal Relatio	ns.	
Occupations.	Total deaths.	Percentage.	Married.	Single.	Widows.	Children.	Depen- dents.
Cagers	5	1.23	1	4	1	1	2
Drivers	34	8.37	12	22	11	23	30
Engineers	2	.49	1	1	1	2	3
Foremen	2	.49	2		2	3	Ē
Laborers	13	3,20	7	6	6	15	22
Loaders	6	1.48	4	2	4	7	11
Machine helpers	5	1.23	2	3	2	3	3
Machine runners	3	.74	2	1	2	4	6
Mechanics	1	.25	1		1	8	9
Mine examiners	3	.74	3		3	6	
Mine managers	4	.99	4		4	20	24
Miners	279	68,72	185	77	180	485	668
Pumpmen	2	,49	2		1	7	8
Shot firers	16	3.94	13	3	13	23	36
Spraggers	3	.74		3		2	
Superintendents	1	.25	1		1	8	3
Timbermen	17	4.19	9	5	9	39	4.5
Trackmen	5	1.23	5		5	14	19
Trappers	4	.98		4		5	€
Tripriders	1	.25		1			
Total	406	100.00	254	132	246	675	912

Note-20 not reported as to conjugal relations.

Table 89 gives the same list as Table 88, but covers only the Cherry mine accident.

This table shows that 256 out of the total of 406 deaths in the mines of the State were caused by that terrible disaster. It is shown that these men left 604 of the 912 dependents left by all deaths caused in the mines of the State.

Table 89—Occupation and Conjugal Relations of Men Killed in Cherry Mine Disaster.

				Conj	ugal Relat	ions.	
Occupation.	Total deaths.	Percentage.	Married.	Single.	Widows.	Children.	Depen- dents.
Cagers	2	0.78	1	1	1	1	. 2
Drivers	12	4.69	3	9	3	6	. 9
Laborers	1	.39	1		1	4	5
Mine examiners	1	.39	1		1	1	2
Mine managers	2	.78	2		2	10	12
Miners	211	82.42	142	52	137	362	504
Spraggers	2	.78		2		2	3
Timbermen	16	6,25	8	5	8	34	42
Trackmen	5	1.96	5		5	14	19
Trappers	4	1.56		4		5	6
Total	256	100.00	163	73	158	439	604

Note-20 not given as to conjugal relations.

Table 90 presents by occupations the number of employés in each class, also the number of casualties, both fatal and non-fatal, giving the percentages, number employed to one man, rate per 1,000 employed, and average ages in each class. The most hazardous occupation is shown to be that of shot-firer, there being 2.33 per cent or one man to every forty-three employed in this class killed during the year, while the next is that of drivers, which shows only .47 per cent or one man to every 212 employed in this class killed during the year. It is also shown that out of 1,310 trackmen and 1,183 trappers, or a total of 2,493 men employed in these two classes, there was no fatal accidents.

However, this table does not include the 256 men who lost their lives in the Cherry mine disaster.

Table 90—Occupational Casualties, Both Fatal and Non-Fatal, Total Number Employed, Percentages, etc.—1910.

Classification	ber of em-	Tor numb casua	er of	Percer of e clas	ach	Nun empl in e class t ma	oyed ach o one	Rate 1,0 emplo eac clas	00 yed in: ch	A ver ago of th	es
of Occupations.	Total number ployés in ea	Fatal.	Non-fatal.	Killed.	Injured.	Killed.	Injured.	Killed.	Injured.	Killed.	Injured.
Cagers	835	9	16	0.36	1.92	278	52	3.6	19.16	38	32
Drivers	4,671	22	159	0.47	0.34	212	29	4.71	34,04	25	25
Laborers	2,671	9	35	0.34	1.31	297	76	3,37	13,10	23	30
Loaders	10,209	8	37	0.08	0.36	1,351	276	0.78	3.62	32	33
Machine men	2,618	6	38	0.23	1.45	436	69	2.29	14,51	32	29
Miners	36,533	68.	337	0.19	0.92	537	109	1.86	9.22	39	36
Shot firers	688	16	14	2.33	2.03	43	49	23.26	20.35	32	36
Timbermen	1,064	1	26	0.09	2.44	1,064	41	0.94	24.44	50	41
Trackmen	1,310		5		0.38		262		3.82		47
Trappers	1,183		8		0.68		148		6.76		22
Total classified	61,782	133	675	0.22	1.09	465	92	2,15	10.93	35	32
Not classified	9,738	17	67	0.17	0,68	573	145	1.75	6.82	36	36
Total—all employês	71,520	150	742	0.21	1.04	477	96	2.1	10.37	35	34

NOTE- The 256 fatal casualties in the Cherry mine disaster November 13, 1909, are omitted from this table.

Table 91 presents a list of nineteen states and two countries, giving the number of persons killed in coal mines for ten years—1900-1909. This table is reproduced from the *Engineering and Mining Journal*, of New York, Dec. 31, 1910. The data is prepared by Frederick L. Hoffman. In the coal mining experience of North America during 1909, there occurred 2,434 fatal accidents among an average number of 717,317 mine employés, or at the rate of 3.39 per 1,000. During the previous year the rate was 3.84 per 1,000, so there has been a gratifying diminuation in the fatality rate, equivalent to .45 per 1,000.

Table 91—Number of Persons Killed by Accident in Coal Mines of the United States and Canada—1900-1909.

								,			, -
	1900	1901	1902	1903	1904	1905	1906	1907	1908	1909	Ten years
Alabama	37	41	50	57	84	185	96	154	108	129	94
Colorado	29	55	73	40	89	60	88	99	61	99	693
Illinois	94	99	99	156	157	199	155	165	183	213	1,52
Indiana	18	24	24	55	34	47	31	53	45	50	38
Iowa	29	27	55	21	31	24	37	35	38	28	32
Kansas	20	10	30	36	*16	36	30	52	31	35	29
Kentucky	17	21	19	25	19	31	40	32	40	33	27
Maryland	7,	12	11	16	12	16	13	5	12	19	12
Michigan	10	6	6	8	7	8	6	7	6	9	7
Missouri	10	15	10	17	11	11	16	8	10	21	12
Montana	6	7	12	5	9	8	13	14	21	12	10
New Mexico	15	6	17	17	15	5	9	31	34	18	17
Ohio	68	72	81	124	118	114	126	153	112	115	1,08
Oklahoma	40	44	60	33	30	44	39	32	44	40	40
Pensylvania (anthracite)	411	513	300	518	595	644	557	708	678	567	5,49
Pennsylvania (bituminous)	265	301	456	402	536	479	477	806	572	506	4,80
Tennessee	10	44	226	26	28	29	33	31	34	31	49
Utah	209	9	8	7	9	7	7	8	8	16	28
Washington	33	27	34	25	31	13	21	37	25	39	28
West Virginia	141	134	120	159	140	194	269	356	625	364	2,50
British Columbia	17	102	139	42	37	12	15	31	18	57	470
Nova Scotia	21	14	19	31	19	20	28	35	39	33	25
Total	1,507	1,586	1,849	1,820	2,027	2,186	2,106	2,852	2,744	2,434	21,11

^{*} Six months only.

Table 92, as the previous table, is also reproduced from the *Engineering and Mining Journal*, of New York, Dec. 31, 1910. This table shows the number killed in the mines to every 1,000 persons employed. During 1909 the rate was 3.39 per 1,000, while the rate for the entire ten years shown was 3.46 per 1,000 employed.

Table 92—Fatal Accidents in Coal Mines in the United States and Canada—1900-1909.

			Numb	er of P	ersons	Killed	per 1,0	000 Em	ployed	l.	Ten
	1900.	1901.	1902,	1903.	1904,	1905,	1906.	1907.	1908.	1969.	years.
Alabama	2.59	2,90	2,79	2,94	4.77	10.75	5,23	7,61	5.75	6,40	5.28
Colorado	3.99	6.88	8,11	3.89	8,26	5.05	7,32	7,67	4.25	7.53	6.32
Illinois	2,39	2.24	2,15	3,13	2.87	3.36	2.49	2.47	2.58	2.93	2,69
Indiana	2,03	1,98	1.83	3,64	1.91	2,63	1.58	2,79	2.36	2.64	2,36
Iowa	2.22	2.05	4.23	1,59	1,90	1,36	2,20	2.05	2,20	1.50	2.09
Kansas	1.87	1,05	3,22	3,61	3,09	2,97	2.95	4.35	2,74	3.04	2.91
Kentucky	1.88	2.15	1.58	1.85	1.37	2.06	2.39	1.82	2.15	1.76	1.91
Maryland	1.32	2.23	1.89	2,82	2.11	2.57	2.10	0.85	2.00	3.34	2.13
Michigan	6.11	3.26	4.24	2.54	2,58	2.16	2.83	2.43	1.94	3,04	2.86
Missouri	1,31	1,63	1.09	1.85	1,09	1,06	1.65	1.70	1.0€	2.31	1.46
Montana	2,53	3,24	6.19	2.32	3,59	3,67	5.43	5.12	6,68	3,11	4,20
New Mexico	7.44	4.81	10.11	7.26	7.61	2,35	3.82	10,13	9,26	5.57	6,99
Ohio	2,14	2.15	2,16	3,00	2,57	2,58	2.71	3,20	2.23	2.45	2.54
Oklahoma	7.59	8.35	9,62	5,42	3,63	5,76	4.81	4,15	3.02	2,76	4,85
Pennsylvania (anthracite)	2,86	3.47	2.03	3,41	3,69	3,83	3,35	4.19	3.89	3,31	3,43
Pennsylvania (bituminous)	2.44	2.56	3.36	2.65	3,44	2,90	2.76	4,40	3,15	2.72	3.08
Tennessee	1,15	5,23	25,80	2,69	2,81	2.76	3.07	2.79	3.06	2.77	4.91
Utah	138,96	5,06	3.24	3.21	4.06	3,57	3,69	3.07	2,99	5,36	12.93
Washington	7.79	5.59	7.83	5,13	6.69	2,61	4.08	6.05	4.68	6.81	5.68
West Virginia	5.03	4.14	3,41	4,03	3,08	3.88	5,20	6,33	10,35	5,85	5,43
British Columbia	4.22	25,67	34,65	9.85	8,31	2.72	3,12	5,12	2.95	8.88	9.69
Nova Scotia	3.17	1,83	2.36	2.79	. 1.63	1.86	2.31	2.89	3,02	2,73	2,46
Total	3.25	3.21	3,48	3.16	3,33	3.40	3.20	4.15	3.84	3,39	3.46

NON-FATAL ACCIDENTS.

Table 93 presents, by districts, the number of non-fatal accidents or injuries occurring in the coal mines of the State for the year 1910. The total number was 742. This is a decrease of 152 from last year. Four of the districts, the first, second, seventh and ninth, account for 60.64 per cent of the total number. The first district shows the lowest number of tons to each man injured, and the highest ratio, 15.9 men to every 1,000 employed. The number of tons mined to each man was 65,657 for the State.

Table 93-Non-Fatal Accidents by Districts-1910.

Districts.	Number of men injured.	Under ground.	Above ground.	Under ground.	Above ground.	Dloyés.	Total tons of coal mined.	Number of employés to one man injured.	Ratio per 1,000.	Number of tons mined to each man injured.
	ž.	i i	A B	p.	4	To	T ₁	ž	E.	ž
First	118	115	3	6,813	599	7,412	3,018,246	63	15.9	25,578
Second	106	103	3	8,246	705	8,951	3,880,765	75	11.8	36,611
Third	14	14		4,942	546	5,488	2,815,979	356	2.5	201,141
Fourth	59	59		6,729	526	7,255	5,210,662	117	8.1	88,316
Fifth	69	67	2	5,963	507	6,470	3,776,768	89	10.7	54,736
Sixth	35	33	2	6,560	586	7,146	5,862,508	202	4.9	167,500
Seventh	102	99	3	6,643	604	7,247	5,913,722	69	14.1	57,977
Eighth	57	56	1	5,824	513	6,337	5,031,524	108	8.9	88,272
Ninth	124	122	2	8,550	810	9,360	6,632,666	83	13.2	53,489
Tenth	58	56	2	8,090	878	8,968	6,575,013	152	6.5	113,362
The State	742	724	18	68,360	6,274	74,634	48,717,853	101	9.9	65,657

Table 94 presents the record of non-fatal accidents for a series of twenty-eight years.

Table 94—Non-Fatal Accidents for Twenty-eight Years.

Year.	Number of men injured.	Total number of employés.	Total number of tons of coal mined.	Number of employés to one man injured.	Rate per 1,000.	Number of tons of coal produced to one man injured.
1883	231	23,939	12,123,456	104	9.6	52,482
1884	197	25,575	12,208,075	130	7.7	61,970
1885	176	25,946	11,834,459	147	6.8	67,241
1886	171	25,846	11,175,241	151	6.6	66,126
1887	180	26,804	12,423,066	149	6.7	69,017
1888	179	29,410	14,328,181	164	6.1	80,046
1889	201	36,076	14,017,298	150	6.7	69,738
1890	294	28,574	15,274,727	97	10.3	51,955
1891	367	32,951	15,660,698	90	11.1	42,672
1892	370	33,632	17,862,276	91	11.0	48,276
1893	403	35,390	19,949,564	88	11.4	49,503
1894	521	38,477	17,113,576	74	13.5	32,848
1895	605	38,630	17,735,864	64	15.7	29,315
1896	672	37,032	19,786,626	55	18.1	29,44
1897	518	33,788	20,072,758	65	15.3	38,751
1898	438	35,026	18,599,299	80	12.5	42,46
1899	597	36,991	23,434,445	62	16.1	39,25
1900	611	39,384	25,153,939	65	15.5	41,168
1901	422	44,143	26,635,319	104	9.6	63,117
1902	406	46,005	30,021,300	127	8.8	73,94
1903	410	49,814	34,955,400	121	8.2	85,25
1904	507	54,774	37,077,897	108	9.3	73,135
1905	535	59, 230	37,183,374	111	9.0	69,500
1906	480	62,283	38,317,581	130	7.7	79,82
1907	636	66,714	47,798,621	105	9.5	75,15
1908	819	70,841	49,272,452	86	11.6	60,16
1909	894	72,733	49,163,710	81	12.3	54,99
1910	742	74,634	48,717,853	101	9.9	65,65
Average -28 years	449	42,094	24,924,895	94	10.7	55,51

Table 95 shows the occupation of men hurt in non-fatal accidents, by districts. Accidents among drivers and miners, two occupations out of thirty-three represented, account for 66.89 per cent of the whole number injured.

Table 95—Non-Fatal Accidents by Occupations with Totals and Percentages, by Districts.

Occupations. Brusher Cagers	1st.	2d.	1	1								
	1		3d.	4th.	5th.	6th.	7th.	8th.	9th.	10th.	Total.	cent- ages.
Tagora			1								1	0.1
Jagers		2	1	2		1	4	1	3	2	16	2.16
Car dropper									1		1	0.13
Carpenters	. 2		1							1	4	0,54
Car coupler				1					1		2	0.27
Car trimmers						1			2		3	0.40
Coal pickers	- 1				ļ 						1	0.13
Drivers	. 11	17	2	20	12	10	24	14	35	14	159	21.42
Engineers	. 1				1		1		1		4	0.54
Firemen							1			1	2	0,27
Laborers	. 3	14	1	6	8	4	11	5	4	3	59	7.95
Loaders				2		7	15	5	6	2	37	4.99
Machine men				1					7		8	1.08
Machine runners						3	9		2	4	18	2,43
Machinist	.						1				1	0.13
Mechanics					1						1	0.13
Machine helpers								1	1	1	3	0.40
Mine examiners					1				1	1	3	0.40
Mine managers					1				1	2	4	0.54
Miners	. 92	63	6	15	35	7	26	23	48	22	337	45.47
Motormen				1	1			1	1		4	0.54
Oilers				1							1	0.13
Painters		1									1	0.13
Shot firers		3		2	1		1	. 2	3	2	14	1.89
Shovelers						1					1	0.13
Spraggers		. 2							1		3	0.40
Stablemen		. 2		1			1				4	0.54
Timbermen	:	1	1	. 3	3 6	1	. 6	3	3	1	27	3.64
Tracklayers				2				. 1		1	10	1.35
Trappers		. 1	1	1	1		1		2	1	8	1.08
Trip riders				1	1	1		. 1			3	0.40
Watchman							. 1				1	0.13
Yardman				ļ					1		1	0.13
Total	118	106	14	59	69	35	102	57	124	58	742	
Percentages	15.90	14.29			9.29	4.72	13.75	7.68	16.71	7.82		100,00

CONJUGAL RELATIONSHIP AND TIME LOST

Table 96 presents, by districts, the conjugal relationship of the injured; the number having recovered from injuries at the close of the fiscal year, also the number and average days of lost time. The total number recovered and losing time was 589 or 79.38 per cent of the whole number injured, these lost an average of 61.49 days.

Table 96—Non-Fatal Accidents, Conjugal Relation of the Injured, Dependents, Time Lost, by Districts.

Districts	Total injured.	Married.	Single.	Children.	Depend- ent.	Number recov- ered and losing time.	Total days lost	Average days lost.
First	118	72	46	170	229	92	6,146	66.80
Second	106	59	47	157	216	69	4,375	63.40
Third	14	7	7	17	24	14	838	59.86
Fourth	59	29	30	81	105	51	2,812	55.13
Fifth	69	40	29	116	146	53	3,600	67.92
Sixth	35	25	10	51	69	34	2,381	70.00
Seventh	102	52	50	112	164	94	5,997	63.80
Eighth	57	34	23	81	115	50	2,438	48.76
*Ninth	124	77	46	145	214	89	5,062	56.88
Tenth	58	41	17	91	130	43	2,566	59.67
The State	742	436	305	1,021	1,412	589	36,215	61.49

^{*} One married or single, not known.

Causes of Non-Fatal Accidents.

Table 97 presents a list of forty-four causes and one cause not given from which the injuries were sustained. The two causes, falling coal and falling rock, roof, etc., produced 369 or 49.7 per cent of the injuries, while pit cars caused 188 or 25.3 per cent of the injuries.

Table 97—Non-Fatal Accidents by Causes for 1910, by Districts, with Totals and Percentages.

Classification of Causes.	1				Di	strict	s.				The	Per-
Gassincation of Causes.	1st.	2d.	3d.	4th.	5th.	6th.	7th.	8th.	9th.	10th.	State.	cent- ages.
Axe						1					1	0.13
Belt and pulley									1		1	0,13
Blast explosion			.				1			. 1	2	0.27
Blown out shot										1	. 1	0.13
Cable							1				1	0.13
Cage	. 6	9			ļ	2	1		2		20	2.70
Coal falling down shaft		1	1	1			1		1		. 5	0.69
Coal fell from car						1					. 1	0.13
Crow bar	. 1										. 1	0.13
Door		:		1			1		1		. 3	0.40
Dynamite cap				1							. 1	0.13
Engine					1	1	1			1	4	0.54
Falling articles	. 3			1	2		2		1	:	11	1.48
Falling coal	. 30	20	4	6	8	10	10	11	21	9	129	17.39
Falling rock, roof, etc		38	1	13	35	8	37	20	31		240	32.33
Falling from car, etc		1				1	2	1	1	1	9	1.21
Falling down, etc						1	1	1			. 3	0.40
Falling down shaft	. 1	1					. 1		1		. 4	0.54
Falling in hole, etc					1				1	:	3	0.40
Fan	1				. 1						. 1	0.13
Flying coal	. 2	3	3	. 1	1		. 1				. 8	1.08
Flying steel	1			. 1			. 1				. 2	0.27
Flying sulphur		1									. 1	0.13
Flying wood	1				. ,						. 1	0.13
Gas explosion		1		. 0	2				. 6	,	6 14	1.88
Hammer		í	1			. 1					. 2	0.27
Jack					ı						. 1	0.13
Lifting weight	1								. 1		. 5	0.69
Machine									. 2		3 5	0.69
Motor						2			. 1		1 5	0.69
Mule, injured by						i			. 1	ļ		0.69

Table 97—Concluded.

Classification of Causes.					Dí	stric	ts.				The	Per-
Classification of Causes.	1st.	2d.	3d.	4th.	5th.	6th.	7th.	8th.	9th.	10th.	State.	ages.
Mule, kicked by	1	1		1	3		2		4	1	13	1.7
Nail, stepped on	1						1				2	0.2
Pick							1	2	1		4	0.5
Pit car	17	22	6	24	11	6	29	20	37	16	188	25.3
Powder explosion		4		1	1					1	7	0.9
Premature blast			1			1	2		6		10	1.3
Prop	1						1	1			3	0.4
Rail	1	2					2				5	0.6
Railroad cars					1	1		1	2	1	6	0.8
Sproket wheel										1	1	0.1
Steam			1				. 3				4	0.5
Switch		2								1	3	0.4
Tail chain				2					2	1	5	0.6
Not given				1							1	0 1
Total	118	106	14	59	69	35	102	57	124	58	742	100.0
Percentages	15.90	14.28	1.89	7.95	9.30	4.72	13.75	7.68	16.71	7.82	100.00	

Table 98 presents, by districts, in condensed form, the leading causes of all the non-fatal accidents during the year. The presentation is of four distinct causes: use of powder, gas explosions, falling coal, rock etc., and pit cars. The injuries from use of powder is 28 or 3.7 per cent, gas explosions 14 or 1.8 per cent, falling coal, etc., 369 or 49.7 per cent, and pit cars 188 or 25.3 per cent. Following the districts are the totals for the past ten years.

Table 98—Non-Fatal Accidents Caused Primarily by Explosions of Powder, Gas Explosions, Falling Coal, Rock, etc., Pit Cars and Various Causes, by Districts, for the Year 1909 and for Nine Years.

		Use	of Pow	der.		1 0	(Other (Causes.		To	tal.
Districts and Years.	Blast explosions.	Blast, prema- ture.	Blown out charge.	Powder ex- plosions.	Flying coal.	Total from use of powder.	Gas explosion.	Falling coal, rock, etc.	Pit cars.	Various.	From other causes.	From all causes.
First					2	2		79	17	20	116	118
Second				4	3	7		50	22	19	99	106
Third		1				1		5	6	2	13	14
Fourth				1	1	2	2	19	24	12	57	59
Fifth				1	1	2		43	11	13	67	69
Sixth		1				1		18	6	10	34	35
Seventh	1	2			1	4		47	29	22	98	102
Eighth								31	20	6	57	57
Ninth		6		,		6	. 6	52	37	23	118	124
Tenth	1		1	1		3	6	17	16	16	55	58
1910	2	10	1	7	8	28	14	369	188	143	714	742
1909	14	3		11	11	38	25	423	249	159	856	894
1908	8	3		11	14	36	35	402	209	137	783	819
1907	8	4	7	16	15	50	9	327	171	79	586	636
1906	7	1	6	9	9	32	6	253	110	79	448	480
1905	13	3	6	15	13	50	3	269	129	84	485	535
1904	6	5	2	29	12	54	6	264	123	50	453	507
1903	13	3	12	7	12	47	5	164	128	66	363	410
1902	15	1	1	6	5	28	2	198	125	53	378	406
1901		11	2	5	9	27	3	233	113	46	396	422
Ten years	86	44	37	116	107	390	108	2,902	1,545	906	5,461	5,851

Table 99 presents the percentages of causes, under the headings as given in Table 98.

Table 99—Percentages of Non-Fatal Accidents for Nine Years, 1901–1910, by Causes.

							erce	ntag	es-						
		Use	of Po	wde	r.	other s and	0	ther	Caus	es.	All Causes.				
Years.	Blast ex- plosions.	Blasts, pre- mature.	Blown out charges.	Powder ex- plosions.	Flying coal.	From powder, other named causes and all causes.	Gas explosions	Falling coal, rock, etc.	Pit cars.	Various.	Blasts, pow- der, etc.	Gas explosions	Falling coal rock, etc.	Pit cars.	Various
1910	7.1	35.7	3.6	25.0	28.6	100.00	2.0	51.7	26.3	20.0	3.8	1.9	49.7	25.3	19.
1909	36.8	7.9		29.0	26.3	100,00	2.9	49.4	29.1	18.6	4.2	2.8	47.3	27.9	17.
1908	22.2	8.3		30.6	38.9	100.00	4.5	51.4	26.7	17.4	4.4	4.3	49,1	25.5	16.3
1907	16.0	8.0	14.0	32.0	30.0	100.00	1.5	55.8	29.2	13.5	7.9	1.4	51.4	26.9	12
1906	21.9	3.1	18.8	28.1	28.1	100.00	1.3	5.65	2.46	1.76	6.7	1.2	5.27	2.24	17.0
1905	26.0	6.0	12.0	30,0	26.0	100,00	6.2	55.5	26.6	11.7	9.3	0.6	50.3	24.2	15.
1904	11.1	9.3	3.7	53.7	22.2	100.00	1.3	58.3	27.2	13.2	10.6	1.2	25.1	24.3	11.
1903	27.7	6.3	25.5	14.9	25.5	100.00	1.4	45.2	35.3	18.1	11.5	1.2	40.0	31.2	16.1
1902	53.6	3.6	3.6	21.4	17.8	100.00	0.6	52.4	33.0	14.0	6.9	0.5	48.8	30.7	13.1
1901		40.7	7.4	18.5	33.4	100.00	0.8	59.0	28.7	11.5	6.4	0.8	53.1	26.8	10.9
Ten years	22.1	11.3	9.5	29.7	27.4	100.00	2.0	53.1	28.3	16.6	6.7	1.8	49.6	26.4	15.5

Table 100 shows the non-fatal accidents in the coal mines of the State for a series of twenty-eight years. The accidents are here confined to two classes: falling roof and slides in the mines, and those from all other causes.

Table 100—Non-Fatal Accidents from Falling Roof and Sides, and Other Causes, with Percentages Caused by Falling Roof—Twentyeight Years.

	Non-	Fatal Acci	dents.	Percen	tages-
Years	Total.	Falling roof and sides.	All other causes.	Caused by falling roof or sides	All other causes.
1883	231	130	101	56.28	43.72
1884	197	135	62	68.53	31.47
1885	176	118	58	67.00	33.00
1886	171	109	62	63.74	36.2
1887	180	124	56	68.88	31.12
1888	179	112	67	62.58	37.45
1889	201	129	72	64.17	35.8
1890	294	196	98	66.66	33.3
1891	367	227	140	61.85	38.1
1892	370	234	136	63.25	36.75
1893	403	254	149	63.03	36.9
1894	521	294	227	56,43	43.5
1895	605	338	267	55.87	44.1
1896	672	373	299	55.51	44.4
1897	518	310	208	59.85	40.1
1898	438	252	186	60.87	39.1
1899	597	335	262	56.12	43.8
1900	611	323	288	52.86	47.9
1901	422	233	189	55.21	44.7
1902	406	198	208	48,77	51.2
1903	410	190	220	46.34	53.6
1904	507	264	243	52.07	47.9
1905	535	271	264	50.66	49.3
1906	480	253	227	52.71	47.2
1907	636	327	309	51.42	48.5
1908	819	402	417	49.08	50.9
1909	894	423	471	47.30	52.7
1910	742	369	373	49.7	50.3
Total	12,582	6,923	5,659	55.0	45.0

Table 101 presents a record of the total number of men killed and injured in the coal mines of the State during the past twenty-eight years, showing the percentages killed or injured by falling roof and sides for each year. The percentage killed by this cause for the fiscal year is a large decrease from any of the previous years. This is largely due to the fact that 256 were killed by fire in the Cherry mine.

Table 101-—Total Number Killed and Injured, with Percentages of All Accidents Caused by Falling Roof or Sides for Twenty-eight Years.

Years.	Numbe	er from all	Causes.	Per (Cent by Fal	ling.
	Killed.	Injured.	Total.	Killed.	Injured.	Total.
1883	134	231	365	30.0	56.28	47.7
1884	46	197	243	56.5	68.53	66.25
1885	39	176	215	51.3	67.0	64.18
1886	52	171	223	61.5	63.74	63,23
1887	41	180	221	68.3	68.88	68,77
1888	55	179	234	60.0	62.58	61.97
1889	42	201	243	61.9	64.17	63.78
1890	53	294	347	67.9	66,66	66.86
1891	60	367	427	55.0	61.85	60,88
1892	57	370	427	49.1	63.25	61.36
1893	69	403	472	69.6	63.03	63.98
1894	72	521	593	58.3	56.43	56.82
1895	75	605	680	50.7	55.87	55.59
1896	77	672	749	53.3	55.51	55.27
1897	69	518	587	66.7	59.85	60.65
1898	75	438	513	57.33	60.87	60,34
1899	84	597	681	60.71	56.12	56.68
1900	94	611	705	54.3	52.86	53.1
1901	99	422	521	56.43	55.21	55.45
1902	99	406	505	55.55	48.77	50.1
1903	156	410	566	50.64	46.24	47.53
1904	157	507	664	49.68	52.07	51.51
1905	199	535	734	40.20	50.64	47,82
1906	155	480	635	54.2	52.7	53.07
1907	165	636	801	50.91	51.42	51.31
1908	183	819	1,002	49.7	49.08	49.6
1909	213	894	1,107	39.4	47.3	45.8
1910	406	742	1,148	16.01	49.73	37.8

Table 102 gives, by percentages, the increase or decrease for a series of twenty-eight years of the number of men employed, tons mined, men killed and men injured.

Table 102—Percentages of Increase and Decrease from Year to Year of Men Employed, Tons Produced, Men Killed and Men Injured for a Series of Twenty-eight Years.

37	Men En	ployed.	Tons Pi	roduced.	Kil	led.	Inju	red.
Year.	Increase.	Decrease.	Increase.	Decrease.	Increase.	Decrease.	Increase.	Decrease
883 to 1884	6.83		0.7			65,67		14.7
.885	1.45			3,06		15,22		10.6
886		0.38		5.57	33,33			2.8
887	3.71		11,17			21,15	5.26	
.888	9.72		15.34		26.83			0,5
889	2,26			2.17		23.64	12.29	
.890		5.00	8.97		26.19		46.27	
891	15.31		3,53		13,2		24.83	
.892	2.07		14,06			5.00	0.82	
.893	5.23		11.69		21.05		8.92	
894	8.72			14.22	4.35		29,28	
895	0.40		3.64		4.17		16.12	
896		.4.7	11.56		2,67		11.7	
.897		8.82	1,45			10.39		22.9
.898	3.66			7.34	8.7			15.4
899	5.61		26,00		12.00		36,30	
900	6.47		7.34		11.90		2,35	
901	12.08		5.89		5,32			30.9
902	4,21		12.71					3,8
903	8.28		16,44		57.58		0.99	
904	9,96		6.07		0.64		23,66	
1905	8.14		0.28		26.75		5.52	
906	5.15		3,05			22,11		10.2
907	7.11		24.74		6.45		32,50	
908	6,19		3.08		10.91		28.77	
1909	2.67			0.22	16,39		9.16	
910	2.61			0.91	90.61			17.0
28 years	211,77		301,85		202,99		221,21	

ENTIRE OUTPUT OF THE STATE.

We can get a very good estimate of the total amount of coal that has been mined in the State, although previous to 1882 we have no data except that received from the United States Census Bureau and reports that county mine inspectors began making to their county boards in 1872.

From these reports and estimates that have been made of the intervening years where no records appear, the following table was compiled by Prof. II. Foster Bain in his Geological Bulletin No. 3, and which table we herewith publish through his courtesy. The figures by this report place the coal mined during these years at 73,123,123 tons.

Table 103 in this column gives the output of the succeeding years

1882-1910. The total amount is 782,039,237 tons.

Table 103—Coal Production of Illinois, 1833-1881.

Year.	Quantity in tons.	Year.	Quantity in tons.
1833	6,000	1860a	728,000
1834	7,500	1861	670,000
1835	8,000	1862	780,000
1836	10,000	1863	890,000
1837	12,500	1864	1,000,000
1838	14,000	1865	1,260,000
1839	15,038	1866	1,580,000
1840a	16,967	1867	1,800,000
1841	35,000	1868	2,000,000
1842	58,000	1869	1,854,000
1843	75,000	1870a	2,624,163
1844	120,000	1871	3,000,000
1845	165,000	1872	3,360,000
1846	165,000	1873	3,920,000
1847	180,000	1874	4,203,000
1848	200,000	1875	4,453,17
1849	260,000	1876	5,000,000
1850	300,000	1877	5,350,000
1851	320,000	1878	5,700,000
1852	340,000	1879	5,000,000
1853	375,000	1880	6,115,37
1854	385,000	1881	6,720,000
1855	400,000	Total 48 years	73,123,123
1856	410,000	Reported to Bureau of Labor 1882-	#00 04 / · ·
1857	450,000	1910	708,914,11
1858	490,000	Total output of the State	782,037,23
1859	530,000		

⁽a) United States census, fiscal year.



REPORTS

of the

State Inspectors of Mines.



FIRST INSPECTION DISTRICT-1910.

FIFTH ANNUAL REPORT.

Counties-Grundy, Kankakee, LaSalle, Putnam, Will.

HECTOR MCALLISTER, Inspector, Streator.

Hon. David Ross, Secretary State Bureau of Labor Statistics, Springfield:

Sir—Complying with section 12 of the General Mining Law of Illinois, setting forth the duties of the State inspectors of coal mines, also providing for the health and safety of persons employed therein, I submit the fifth annual report of the coal mines in the counties comprising the first inspection district for the year ending June 30, 1910. The district now includes five counties, Putnam county, formerly in the third district, having been added to the first district by the commissioners of labor in a reapportionment of the coal producing counties made in June, 1909.

This report gives tabulated statistics of the several counties; setting forth in detail the physical character of each coal mine, together with the number of men employed; tons of coal produced; powder consumed in producing the same; the days of active operation price per ton paid to miners and tables of the fatal and non-fatal accidents during the year.

The following summary gives the most essential items of the coal mines of the district.

of the district.	
Number of counties	5 58
Number of mines	
Shipping mines	29
Local mines	29
Number of miners	5,409
Others underground	1.295
Boys underground	109
Boys above ground	11
Others above ground	588
Total number of employés	7.412
Total number of employes	018,246
	360.054
	718.988
	321,156
	17,036
	562,265
Tong of slack	38,747
Aggregate value of total product, all mines	587,044
Days of active operation shipping mines	202
Kegs of powder used	22.993
Tons of coal shipped for all mines	457,179
	111.170
	209.913
	117.019
Tons consumed and wasted, shipping mines	111,013

Number of fatal accidents	8
Number of fatal accidents	0
Number of non-fatal accidents	118
Number of employes to each fatal accident	927
Number of employes to each non-fatal accident	62
Trainber of employes to each non-latal accident	99
Tons of coal produced to each fatal accident	277 281
Tons of coal produced to each non-fatal accident	95 578
Ratio of fatal accidents per 1,000 employés	1 1

A comparative statement is shown of the production of coal, by counties, for the years 1909 and 1910, with the increase and decrease in tonnage:

Counties.	Total Out Grades of C	Total Output of All Grades of Coal in Tons.					
	1909.	1910.					
Grundy	1,177,073	927,152	249,921				
Kankakee	33,908	8,435	25,473				
LaSalle	1,666,220	1,471,944	194,276				
Putnam	561,804	470,132	91,672				
wiii	182,612	140,583	42,029				
Total	3,621,617	3,018,246	603,371				

Every county in the district shows a decrease in tonnage, the aggregate of which was 603,371 tons. The counties of Grundy and La Salle make up 736 per cent of this decrease.

NEW MINES.

Thomas Fransiski has opened a new mine north of Kangley. Hughs and McLarm have also opened a new mine north of Kangley both in La Salle county.

William Hudson has opened a new mine north of Morris in Grundy county.

ABANDONED MINES.

The Star Coal Company has abandoned its No. 5 mine at Kangley, La Salle county.

Murphy, Linskey and Kasher have abandoned their No. 3 mine at Braidwood.

The Joliet & Aurora Coal Company have abandoned its mine also at Braidwood, both in Will county.

The Big Four Wilmington Coal Company has abandoned its No. 3 mine at Coal City. Grundy county.

J. H. Cryer has abandoned his mine near Morris, Grundy county.

Nelson and Stokes have abandoned their mine near Streator, La Salle county.

CHANGE OF OWNERSHIP.

John Heather has purchased the mine formerly operated by Frank Gilbride, north of Morris in Grundy county and John Stalker has purchased the mine formerly operated by James Heather, north of Morris in Grundy county.

FATAL ACCIDENTS.

August 10, 1909, Joe Rudizia, miner, aged 25 years, married, was severely injured by coal flying from a shot in the Braceville Coal Company's No. 6 mine, Braceville, Grundy county. Deceased was working alone, and as he

did not arrive home at the usual time, John and Antoni Girat went to the mine to look for him; they found him sitting by a large stone, they called him by name but did not get any intelligent answer. It is supposed that he had fired a shot and did not reach a safe distance before it exploded; a large piece of coal was removed from his scalp, which would indicate it had been blown into the skull by the force of the explosion. He died the 22nd, twelve days after the accident occurred. He leaves a widow and one child.

September 16, 1909, John Edwards, miner, aged 58 years, married, was seriously injured by falling rock at the face of his working place in the Braceville Coal Company's No. 6 mine, Braceville, Grundy county. Deceased was putting in a building when a rock fell from the roof striking him across the back; he died January 10, 1909. He leaves a widow and one

child.

October 2, 1909, Lewis Krausney, miner, aged 69 years, married, was killed instantly on the entry about 250 feet from the face of his working place, in the La Salle County Carbon Coal Company's La Salle mine. Deceased was eating his lunch about 2:30 p. m. at the time Stany Stassak, rodman, was brushing the entry and had prepared a blast in the roof; before lighting the squib he saw Krausney sitting about 120 feet from him. Stassak called to him, fire, but he probably did not hear him; when under the blast it went off with the result as stated. He leaves a widow and one child.

November 2, 1909, Gustav Gertz, miner, aged 65 years, married, was killed instantly by falling rock at his working place in the M. & H. Zine mine, La

Salle, La Salle county. Deceased leaves a widow and one child.

November 20, 1909, George Svatz, miner, aged 35 years, married, was killed instantly by falling rock at the face of his working place in the Chicago, Wilmington & Vermilion Coal Company's No. 2 mine, Streator, La Salle

county. He leaves a widow and three children.

December 27, 1909, Walter Hysin, driver, aged 51 years, married, was killed instantly by being crushed under a trip of loaded pit cars in the M. & H. Zinc Company's mine, La Salle, La Salle county. How this accident occurred no one could tell, as no person was present at the time. Deceased was driving a trip from the first parting to the bottom of the shaft, and was about 60 feet from the parting. It was assumed that he was attempting to get on the first car and in some manner or other fell in front and was crushed underneath with the result as stated. He leaves a widow and six children.

March 1, 1910, Mike Sedlock, miner, aged 45 years, married, was killed instantly by falling rock at the face of his working place in the Illinois Zinc Company's No. 1 mine, Deer Park, Illinois, La Salle county. He leaves

a widow and five children.

April 9, 1910, Thomas Garrity, miner, aged 65 years, married, was seriously injured by falling rock at the face of his working place in James Bell's mine at Morris, Grundy county. He leaves a widow and two children. Following will be found the tables of both fatal and non-fatal accidents,

Following will be found the tables of both fatal and non-fatal accidents also the tables showing the statistics of the coal mines in this district.

Respectfully submitted.

Respectfully submitted, HECTOR MCALLISTER,

State Mine Inspector, First District, Streator, Ill.

Fatal Casualties—First District—July 1, 1910.

Date.	Name.	Age.	Occupation.	Residence. (Town.)	Married.	Single.	Widow.	Children.	Dependents.	Cause of Accident.
		45 65	Minerdo	Portland Morris			1	5 2		Flying coal Flying rock .do .do .do .do .fo .do .do .do .do .do .do .do .do .do .d

Recapitulation of Fatal Casualties—First District—1910.

Residence.	No.	Occupation.	No.	Cause of Accident.	No.	Colliery.	No.
Braceville Braidwood LaSalle Morris Portland Streator Total	1 3 1	DriverMiners	1 7	Flying coal	. 6	Braceville Coal Co C., W. & Ver. Coal Co Illinois Zine Co James Bell. LaSalle Co. C. C. Co M. & H. Zine Co	1

Non-Fatal Casualties—First District—July 1, 1910.

		11011 1 avav C								
Date	2.	Nume.	Age.	Residence. (Town.)	Married.	Single.	Children.	Dependents.	Character of Injury and Cause of Accident.	Time lost—days.
1909 July	1	John Bastuck	45	Cedar Point	1	·i	5	6	Back injured, falling rock Leg broken, pit car Foot injured, falling rock Leg broken, pit car Finger injured, falling rock Leg broken, falling rock Leg broken, falling rock Head and breast injured, falling rock	54 38
	8	William Pitkausky Louis Bigolia	36 46	Braceville Granville	i	1	j	2	Ankle broken, falling rock	116 40 30
	12 16	Peter Makeelaete Frank Hawkins	25 29	So. Wilmington		1 1			Arm broken, pit car Foot injured, falling rock	56 72
	20 26	Joseph Viet George Lapinski	23	Coal City			4	1	Leg broken, pit car Finger injured, falling rock	90 36 230
Aug.	28 3 5	John Alice Joe Mussalto Andrew Vallero	24 50	So. Wilmington		i	2		Leg broken, falling rock	70 56
	10	P. Sergent	21	So. Wilmington	1 -	. 1	2		Leg injured, falling rock	42 49
	18	P. Sergent	33 36	Granville					Back and head cut, pit car Finger broken, falling rock Shoulder injured, falling coal	35 105 60
	24	Chas. Showavaskas P. Givrli	122	do So. Wilmington		- 1 -			Back injured, falling rock	30 63
Sept	. 4	John Dalmcki	60						pick	42 117
	7	M. Webanski Joe Fauber Joe Jarus T. Hanley	. 60 50	LaSalle Braidwood		1 .				300 84
	9	T. Hanley Sam Lavek	52	LaSalle		1 .		1	1 .do	93 88 *
	14 15 21	Peter Merio Arnold Seghetti	10	Granville Standard Cedar Point	:	1	i		3 Foot injured, pit car Leg broken, falling coal Leg injured, pit car	120 * 30
	25 27	T. Hanley Sam Lavek Peter Mcrio Arnold Seghetti Peter Shinkus Matt Banks Paul Ruva Scrento Duranti Joro Moro Jo Gicar J. Gricar J. Cappilini John Emprall Henry Momion	2:	LaSalle Braidwood	- -	1 -	i	5	6 Leg injured, falling rock	38
	29	Joro Moro	. 2	Oglesby	-	1 .	1	2	3 Leg broken, falling rock	90 42 37
Oct.	11	J. Gricar J. Cappilini John Emprall	- 3 - 3	Standard Carbon Hill			i		Foot injured, falling coal Foot injured, falling rock Leg broken, falling coal	45 60 100
	1.9	R Smith	1.5	ISo. Wilmingto	nl	11.	-	5	Ankle broken, pit car	189 30
						1		1		50 88
	20	Joe Dicesori Mike Shiak S. Radrizzi	- 4 - 4	7 LaSalle 0 So. Wilmingto	n	1 .		3	4 Leg injured, falling coal	61 49 35
	25	Frank Senz L. Monari Joe Dicesori Mike Shjak Se Radrizzi Joe Badina M. Rabofoui S Louis Youkers	. 2	2do 8do 0 LaSalle		1	i	1	2 Toe bruised, pit car	119
		Mike Challey Victor Petrouis O. Grachetta					i	4	5 Leg broken, falling rock Finger broken, falling rock	56 62
NT						- 1		2	4 Back and shoulder bruised, falling rock. 3 Back sprained, lifting coal	90 49
Nov		M. Basolo			- 1	- 1	1		Head and back injured, falling rock	30 60
	1	B D. Ginard Dominic Guonzio D Amelia Tintori	- 4	3 Coal City 3 Standard		1	1	2	3 Shoulder dislocated, pit car	90 56 36
		Amelia Tintori 4 A. Lechini						2	3 Finger injured, falling rock 2 Collar bone broken, falling smoke stack	35
	1	4 Dom Riva	. 5	3do		1	-	7 2 2	S Knee sprained, falling rock Back sprained, lifting coal Breast bruised, crow bar	42 35 35
	Ţ	013. 00660	- "	1140						

Non-Fatal Casualties—First District—Continued.

		_		_	_				
Date.	Name.	Age.	Residence. (Town.)	Married.	Single.	Children.	Dependents.	Character of Injury and Cause of Accident.	Time lost—days
1000				1					
20	Anton Peters	27	do		1			Finger injured, falling rock Ribs injured, pit ear Foot injured, falling coal Back injured, falling coal Foot injured, falling rock Foot injured, falling coal	33 30 * 73 51 49
Dec. 11 16 20 20 21 22	F. Degnetti John Gerulis John Conterio John Creamer Thos. Radke. Harry Hawthorne James Cain Louis Baldick Amos Spreit Jacob Kolar A. Parker Joe Chenilli J Haley	54 32 52 26 60 50	-do	1 1 1 1 1 1	 1	9	6 2 4 1	Foot injured, falling rock Foot injured, pit car Knee injured, falling coal Leg broken, falling coal -do	30 44 34 * *
1910 Jan. 7	John Colliery	27	Standard	١	1			Hip broken, falling rock Collar bone bloken, falling coal. Leg broken, falling rock Back and hips bruised, pit car. Foot injured, falling rock	60 90 116 30 84
17 17 22 26	Mike Parizal Wm. Magnel B. Rozenkany	32 18 36	Godley LaSalle	1	1 1	6	7	Leg broken, falling rock	103 52 *
27 28 28 29 29 31 Feb. 1	Joe Blake. A. Berto Tony Maneitti Mike Andrews Mike Pribula. Esidore Bardi Donald Lathrop	19 19 40 35 34 20	so. Wilmington .do. Coal City Streator .do. Granville LaSalle	1111	1 1 1	1	1 1 1	Knee sprained, pit car Arm sprained, lifting coal. Leg broken, falling rock. Foot injured, pit car Ribs broken, falling rock. Toe broken, cage. Leg broken, cage falling to bot-	56 63 97 42 30 *
1	Ed. Verscheure	30	do	١	1			Knee dislocated, cage falling to	*
								bottomBody injured, cage falling to	*
	Joe Urbami Ed. Lathrop			١.	1			Foot broken, cage falling to bot-	*
							5	Feet broken, cage falling to bottomArm bruised pit car	* *
3 9 10 16	W. Donnelly Joe Novak Joe Broghini Frank Pamir Alex Valeki L. Felleto Herbert Clark Pater Cornete	21 47 28 25	So. Wilmington Granville	1 1 1	1 1	3	4 1	Finger cut off, falling coal Shoulder broken, falling rock Arm broken, falling coal Collar bone broken, falling coal	126 * *
24	reter corneto	40		*			٠.	Leg broken, pit car Eye injured, flying coal Back and shoulder injured, fall- ing coal	90 92
	Mike Stasiak Nick Raymond					t	1	Foot injured, pit carArm and knee injured, falling	*
								Hand broken, kicked by mule. Finger mashed, falling rock Head and shoulder injured,	* 30 60
3 12 15 16 17	John Regamani O. Madaleno Frank Stiffell T. Grotti Edmond Libmo	35 30 55 39 40	do	1 1 1	1 1	7 4 4	8 5 5	Leg injured, falling rock Leg broken, falling rock Back injured, falling rock Back injured, fitting rock Knee injured, falling coal	60 95 * 91 *

Non-Fatal Casualties—First District—Concluded.

Date.	Name.	Age.	Residence. (Town.)	Married.	Single.	Children.	Dependents.	Character of Injury and Cause of Accident.	Time lost—days.		
23 23 23 23 23 Apr. 30	Joe Wench. Y. Kolodzg. L. Pouti Louis Vidmar R. Harrop, Jr A. Peretti James Wood H. D. Brown. Total.	36 23 19 45 36 34	do	1 1 1 1	1	1 3 	1 2 4 2	Leg injured, falling rock Hand injured, coal falling down shaft. Foot injured, by rail Knee injured, falling coal Finger injured, pit car Leg broken, falling coal Head cut, falling timber Leg broken, falling of scaffold	30 * 30 63 56 * 70		
Total nu Number	* Not recovered July 1, 1910 – 20; days lost not reported, 6. Total number of men injured										

 $\begin{array}{ll} \textbf{Time lost by men recovered-days} & 6,146 \\ \textbf{Average time lost by men recovered} & 62.71 \end{array}$

Recapitulation of Non-Fatal Casuallies—First District—1910.

Residence.	No.	Occupation.	No.	Cause of Accident.	No.	Colliery.	No.
Braceville Braidwood Cedar Point Coal City Carbon Hill Crocketville Fileen Granville Grouville Jonesville LaSalle Oglesby Rironville So. Wilmington Streator Torino Total	2 9 10 2 3 1 1 12 2 3 21 6 1 1 22 8 12 3		1 11 3 92	Brushing. Cage. Cage. Crow bar Falling coal. Flying coal from shot. Flying rock from shot Falling rock Falling timber Falling scaffold Kicked by mule Lifting coal. Nail Pit cars. Sulphur from pick Smoke stack Timbering Rail	5 1 34 2 1 47 1 1 1 2 1 17 1 1 1 1 1 1 1 1 1 1 1 1 1	Acme	3 7 12 28 4 29 3 1 7

Recapitulation of Non-Fatal Casualties, Nature of Injuries, Conjugal Relations, and Time Lost—First District—June 30, 1910.

	<u>.</u>			di	lents.	Time Lo	st-Days.	Percent-
Nature of Injuries.	Number	Married	Single.	Children	Dependents	Total.	Average.	age of injuries.
Ankles broken Arms broken Arms broken Backs injured Backs injured Backs injured Backs injured Bodies bruised Collar bones broken Eyes injured Feet injured Feet injured Fingers broken Fingers out off Fingers injured Heads and bodies injured Hands injured Hands injured Hips broken Hips injured Knee dislocated Knees injured Legs broken Legs injured Legs broken Legs injured Legs broken Shoulders broken Shoulder sinjured Ribs broken Ribs injured Ribs injured Ribs broken Ribs injured	1 4 1 1 2 2 3 3 3 2 1 7 2 2 1 1 5 2 4 4 1 2 1 1 1 1 2 1 1 1 2 1 1	2 9 9 1 1 2 2 1 1 1 1 1 1 1 1 1 1 1 1 1	2 1 2 3 1 2 2 5 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	5 4 26 2 3 30 5 11 8 1 6 21 188 17 3 2 6 11 11 11 11 11 11 11 11 11	16 36 1 3 6 41 16 10 17 7 19 28 25 4 3 6 6 1 1 2	361 50 105 722 722 77 77 125 153 636 636 167 235 179 30 150 25 1,916 1,9	90 50 266 60 18 26 42 77 37 84 39 36 15 75 38 32 80 45 126 52 80 30 30 15 15 32	3.39 0.85 3.39 10.17 1.69 1.69 1.44 1.69 1.69 0.85 5.08 4.24 1.69 0.85 5.08 4.24 1.69 0.85 1.69 0.85 1.69 0.85 1.69 0.85 1.69 0.85 1.69 0.85 1.69 0.85 1.69 0.85 1.69 0.85 1.69 0.85 1.69 0.85 1.69 0.85 1.69 0.85 0.85 1.69 0.85 0.85 1.69 0.85 0.85 1.69 0.85
Total	118	72	46	170	229	6,146	52	100.00



Grundy County-

_			Ou	1 product.			
Number.	. Name of Operator.	Postoffice address of the mines.	Mine run.	Lump.	Other grades.	Total.	Aggregate value of total product.
	SHIPPING MINES.						
2 3 4 5 6 7	Chi., Wil. &Vermilion CoalCo., No. 1. Big Four Wilmington Coal Co., No. 6 Braceville Coal Co., No. 6 Chi. Wil., & Vermilion Coal Co., No. 2. Wilmington Star Mining Co., No. 6. Big Four Wilmington Coal Co., No. 5. Wilmington Star Mining Co., No. 7. Acme Wilmington Coal Co., No. 7.	Coal City. Braceville So. Wilmington Coal City. Carbon Hill.	751 1,002	114,805 123,853 114,240 67,313 67,481 62,699 56,478 36,421 3,503	52,465 31,378 28,410 38,297 27,400 20,374 21,970 27,850 875	167, 270 155, 982 143, 652 105, 610 95, 574 83, 785 78, 448 68, 105 4, 378	237,628 220,674 212,857 150,032 134,759 117,081 111,445 96,028 7,881
	Total		6,989	646,793	249,022	902,804	1,288,385
	LOCAL MINES.					1	
2 3 4 5 6	Clayton Bros. Hodson & Ledwards. Wood Coal Co. Byrnes & Fleming. James Bell. Wm. Mitchell John Mitchell Max Davidson & Son John Stalker. John Heather.	do		2,800 2,510 2,500 1,800 1,500	150	8,000 2,800 2,660 2,500 1,500 1,400 1,200 1,200 1,088	24,000 8,400 7,052 6,900 5,150 4,125 4,200 2,414 3,300 2,785
	Total		9,800	13,989	559	24,348	68,326
	Total—19 mines		16,789	660,782	249, 581	927,152	1,356,711

Mines reported for 1909, 20. Abandoned mines, 1. Mines in 1910, 19.

First District—1910.

Disposi Out _I	tion of out.	d for blasting	ation.	Er	nployé	s.	д.	Accid	lents .	n solid or	Numb of Anim Unde groun	als	
Tons loaded on cars for shipment.	other purposes.	Kegs of powder used for blasting coul.	Days of active operation.	Average number of miners.	All other employés.	Total.	Tons mined by hand.	Killed.	Injured.	Blasting coalFrom solid or undercut or both.	Horses.	Mules,	Number.
157,177 150,690 138,235 100,070 91,800 78,281 71,234 61,975 2,953	5,292 5,417 5,540 3,765 5,504 7,164 6,130 1,425	10 2,320 1,854 1,250 1,372 6,806	177 212 184 176 201 208 222 215	330 305 315 220 187 167 130 103 22 1,779	99 80 98 88 70 66 36 44 7	429 385 413 308 257 233 166 147 29	167, 270 155, 982 143, 652 105, 610 95, 574 83, 785 78, 448 68, 105 4, 378	1	10 4 33 9 4 4 3 2 1	Soliddo .			1 2 3 4 5 6 7 8 9
852.474	8,000 2,800 2,660 2,500 2,000 1,500 1,400 1,200 1,200 1,208 24,348		220 200 250 208 230 200 233 190 190 96	8 6 6 6 6 4 8 3 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5	1 1 1 1 1 1 1 2 600	122 8 7 6 7 4 9 4 6 7 7 70 2,437	8,000 2,800 2,600 2,500 2,000 1,500 1,400 1,200 1,088 24,348	1	36				1 2 3 4 5 6 7 8 9

Kankakee County-

			Oı	utput of	Mines in	Tons.	l product.
Number.	Name of Operator.	Postoffice address of the mines.	Mine run.	Lump.	Other grades.	Total.	Aggregate value of total product
1	SHIPPING MINES. Clarke City-Wilmington Coal Co., A	Clarke City	2,702	3,807	1,926	8,435	10,552

Mines reported for 1909, 1. Mines in 1910, 1.

First District—1910.

Disposit Outp		for blasting	on,	Eı	nploye	s.		Acci	dents.	solid or	Ani Un	nber of mals der-	
Tons loaded on cars for shipment.	Other purposes.	Kegs of powder used f	Days of active operation.	Average number of miners.	All other employés.	Total.	Tons mined by hand.	Killed.	Injured.	Blasting coal-From sundercut or both.	Horses.	Mules.	Number.
7,935	5(N)	350	73	65	32	97	8,435			Solid			1

LaSalle County-

			Ou	tput of M	Mines in '	Γons.	d product.
Number.	Name of Operator.	Postoffice address of the mines.	Mine run.	Lump.	Other grades.	Total.	Aggregate value of total product
	SHIPPING MINES.						
7 8 9 10 11 12 13 14	Oglesby Coal Co., Oglesby Lasalle Co. Carbon Coal Co., No. 1 Lasalle Co. Carbon Coal Co., No. 5. Chi., Wil. & Vermilion Coal Co., No. 2. Chi., Wil. & Vermilion Coal Co., No. 2. Chi., Wil. & Vermilion Coal Co., Vo. 3. Lasalle Co. Carbon Coal Co., Union. Lasalle Co. Carbon Coal Co., Lasalle Co., Lasalle Co., Lasalle Co., Lasalle Co., Alexander Co., No. 1. Hilmois Zinc Co., No. 1. Hilmois Zinc Co., No. 1. Mrs. E. Hakes, No. 2. Streator Fuel Co. Spicer Coal Co.	LaSalledododododododod	8,432 1,136 90,687 27,380	109, \$42 85, 679 49, 643 56, 735 76, 202 50, 021 37, 393 47, 400 21, 583 30, 519 23, 060 2, 759 7, 748 5, 219 603, 203	21,936 6,207 11,622	173,112 153,320 131,974 127,449 116,576 115,454 100,055 96,337 90,687 99,688 49,949 44,996 17,765 19,370 9,246	294, 671 248, 040 213, 506 177, 243 162, 121 186, 773 161, 855 155, 840 150, 000 73, 376 50, 800 28, 112 25, 000 16, 645 2, 039, 982
2 3 4 5 6 7 8 9 10 11 12 13 14 15 16	LOCAL MINES. M. & H. Zinc Co., M. & H. Manufacturers' Coal Co., Galloway Frances Fuel Co Oscar Kimes Brooker Bros Wm. Bottomley John McNeil Buchanan Bros McCleman & Hughes. Chas. Hendee Jos. Starkey. C. J. Clark Jerry Pratte. James McCullough Adam Crompton Thos. Francisco R. H. Bugin G. Steele	Marseilles Streatordo do Uticado do Kangley Ottawa Kangley Ottawa Streator Utica do 	26, 496 4, 188 768 520 200 275 250 220 200 170 150	2,880 2,089 1,541 500 240 333 200	100	125,740 26,496 8,368 3,000 1,616 768 520 500 440 333 300 275 250 220 200 170	188,610 53,466 13,000 4,500 3,132 1,536 780 780 1,125 666 600 650 550 550 400 340 340 300
	Total—33 mines.		314,306	7,983 611,186	2,436 546,452	1,471,944	2,311,112

Mines reported for 1909, 34. New Mines, 2. Abandoned mines, 3. Mines in 1910, 33.

First District—1910.

Disposit Outp	ion of ut.	for blusting	ion.	Eı	nployé	s.		Accie	lents.	solid or	Numb of Anim Unde	als er-	
Tons loaded on cars for shipment.	Other purposes.	Kegs of powder used for blasting coal.	Days of active operation.	Average number of miners.	All other employes.	Total.	Tons mined by hand	Killed.	Injured.	Blasting coal—From solid or underent or both.	Horses,	Mules.	Number.
156, 592 144, 813 122, 399 123, 879 114, 181 57, 459 36, 113 91, 216 87, 894 10, 240 36, 252 2, 759 11, 937 6, 411	16,520 8,507 9,575 3,570 2,395 57,995 63,942 5,121 2,793 45,818 19,249 8,744 15,006 7,433 2,835	1,742 4,100 3.065 1,080 5 9,992	195 188 206 201 222 212 210 208 304 191 205 200 154 138 226	276 270 191 225 175 210 207 175 107 115 60 62 45 31 2,194	116 109 78 63 55 99 91 74 88 53 29 31 29 19 15	392 379 269 288 230 309 298 249 195 168 89 93 74 64 46 46 3,143	173,112 153,320 131,974 127,449 116,576 115,454 100,055 96,637 56,058 49,949 44,996 17,765 19,370 9,246	1		do do do			1 2 3 4 5 6 7 8 9 10 11 12 13 14 15
	125, 740 26, 496 8, 368 3,000 1, 616 768 520 500 440 333 300 275 5250 220 200 170 150	5 35	284 243 122 160 2255 150 200 130 310 180 60 60 100 110 60 70	711 533 8 6 6 3 2 2 2 2 2 3 3 2 2 2 2 2 2 2 2 2 2	39 222 2 1 1 2 1 2 1 1 1 1	1100 755 100 75 33 34 44 22 33 34 44 43 33 22 44 22	125, 740 26, 496 5, 368 3, 000 1, 616 768 520 500 440 275 225 225 220 200 170						1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18
1,032,845	169,596 439,099	5.326 15.318	150 175	2.366	1,020	3,386	169,596 1,471,944	4	52				

Putnam County-

_			Ou	tput of 1	dines in '	Tons.	l product.
Number.	Name of Operator,	Postoffice address of the mines.	Mine run.	Lump.	Other grades.	Total.	Aggregate value of total product
1 2	SHIPPING MINES. St. Paul Coal Co., No. 1. B. F. Berry Coal Co., No. 1 Total—2 mines		13.112 5,709 18,821		49,876 63,098 112,974	282,393 187,739 470,132	424,590 290,000 714,590

Mines in 1909, 2. Mines in 1910, 2.

Will County-

_							
			Ou	itput of l	Mines in	Tons.	product.
Number.	Name of Operator.	Postoffice address of the mines.	Mine run.	Lump.	Other grades.	Total.	Aggregate value of total product.
1	SHIPPING MINES. Wilmington Coal M. & Mig. Co., No. 6 Murphy, Linskey & Kasher, No. 4	Torino		73,078		86,016	107,441
2	Total					48,835 134,851	73,741 181,182
	LOCAL MINES.						
1	McManus-McQuaney	Braidwood	3,180	2,552		5,732	12,897
	Total		3,180	2,552		5,732	12,897
	Total—3 mines		7,436	104,876	28,271	140,583	194.079

Mines reported for 1909, 5. Abandoned mines, 2. Mines in 1910, 3.

First District—1910.

Disposit Outp	ion of ut.	for blasting	om.	En	nployé	s.		Aceid	ents	solid or	Nun Anii Une grou	f nals ler-	
Tons loaded on cars for shipment.	Other purposes.	Kegs of powder used f	Days of active operation	Average number of miners.	All other employés.	Total.	Tons mined by hand.	Killed.	Injured.	Blasting coab - From s undereut or both.	Horses.	Mules.	Number.
267, 169 175, 919 443, 088	15, 224 11, 820 27, 044	12	202 186 194	516 335 851	161 88 249	$\frac{677}{423} \\ \hline 1,100$	282,393 187,739 470,132			Solid			1 2

First District, 1910.

Disposit Outp	ion of ut.	for blasting	ion.	En	ıployé	s.		Accid	ents.	solid or	Nun O Anii Une grou	f nals ler-	
Tons loaded on cars for shipment.	Other purposes.	Kegs of powder used for blasting coal.	Days of active operation.	Average number of miners.	All other employés.	Total.	Tons mined by hand.	Killed.	Injured.	Blasting coalFrom solid or undercut or both.	Horses.	Mules.	Number.
79,493 41,344 120,837	6,523 7,491 14,014		219 201 210	179 101 280	61 38 99	240 139 379	86,016 48,835 134,851		51				1 2
120,837	5,732 5,732 19,746		200 200 207	10 10 290	3 102	13 13 392	5.732 5.732 140,583		6				1

Shipping Mines-Recapitulation by

			Production	ns of Diffe	rent Grade	s in Tons.			-All
Counties.	Number of mines.	Mine run.	Lump.	Bgg.	Nut.	Pea,	Slack.	Total.	Average value per ton- grades.
Grundy	g	6,989	646,793	31,103		204,795	13,124	902, 804	\$1.427
Kankakee	1	2,702	3,807			1,426	500	8,435	1.251
LaSalle	15	155,129	603,203	260,006	13,323	249,976	20,711	1,302,348	1.565
Putnam	$\dot{2}$	18,821	338,337	30,047		82,927		470,132	1.519
Will	2	4,256	102,324		3,488	21,641	3,142	134,851	1.344
Total	29	187,897	1,694,464	321,156	16,811	560,765	37,477	2,818,570	\$1.502

Local Mines-Recapitulation by

			Productio	ns of Diffe	rent Grade	s in Tons.			IIV-
Counties.	Number of mines.	Mine run.	Lump.	Egg.	Nut.	Pea.	Slack,	Total,	Average value per ton- grades.
Grundy	10	9,800	13,989			200	359	24,348	\$2,806
LaSalle	- 18	159,177	7,983		225	1,300	911	169,596	1.539
Will	1	3,180	2, 552					5,732	2.25
Total	_29	172,157	24,524		225	1,500	1,270	199,676	\$1.765
The State	58	360,054	1,718,988	321,156	17,036	562, 265	38,747	3,018,246	\$1.52

Whole number of mines reported for 1909, 62. Number of new mines opened during the year, 2. Number of mines abandoned during the year, 6. Whole number of mines reported for 1910, 58.

Counties—First District—1910.

Disposit Output-		ting coal.	2		Emp	oloyé	s.			E	Blasting Coa	ıl.
Loaded on cars for shipment.	Other purposes.	Kegs of powder for blasting	Days of active operation	Winers.	Others.	Boys.	All above ground.	Totul.	Tous mined—By hand.	From solidTons.	UndercutTons.	Both methods Tons.
852,474	50,330	6,806	200	1,779	415	45	128	2,367	902,804	902,804		
7,935	500	350	73	65	21	2	9	97	8,435	5,435		
1,032,845	269,503	9,992	204	2,194	625	11	313	3,143	1,302,348	1,302.348		
443,088	27,044	12	194	851	137	27	85	1,100	470,132	470.132		
120,837	14,014		210	280	51	20	28	379	134.851	134.851		
2,457,179	361,391	17,160	202	5,169	1,249	105	563	7,086	2,818,570	2, \$1\$, 570		

Counties—First District—1910.

Disposition of Output—Tons.		ting coal.	n.	Employės.						Blasting Coal.			
Loaded on cars for shipment.	Other purposes.	Kegs of powder for blasting roal.	Days of active operation.	Miners.	others.	Boys.	All above ground.	Total.	Tons mined—By hand.	From solidTons.	Underent Tons.	Both methods: Tons.	
	24,345		202	58		2	10	70	24,348				
	169,596	5,326	150	172	46	2	23	243	169, 596				
	5,732		200	10			3	13	5,732				
	199,676	5.326	170	240	46	4	36	326	199,676				
2,457,179	561,067	22,486	186	5,409	1,295	109	599	7,412	3,018,246	2,818,570			

All Mines—Recapitulation by

				A11					
Counties.	Number of mines.	Mine run.	Lump.	Egg.	Nut.	Pea.	Slack.	Total.	Average value per ton- grades.
Grundy	19	16,789	660,782	31,103		204,995	13,483	927,152	\$1.452
Kankakee	1	2,702	3,807			1,426	500	8,435	1.250
LaSalle	33	314,306	611,186	260,006	13, 548	251,276	21,622	1,471,944	1.570
Putnam	2	18,821	338,337	30,047		82,927		470,132	1.519
Will	3	7,436	104,876		3,488	21,641	3,142	140,583	1,380
Total	58	360,054	1,718,988	321,156	17,036	562,265	38,747	3,018,246	\$1.519 pr

Counties—First District—1910.

Disposit Output-	tion of -Tons.	blasting coal.			Em	ployé	s.			В	Blasting Coa	ıl.
Londed on cars for shipment.	Other purposes.	Kegs of powder for blas	Days of active operation.	Winers.	others.	Boys.	All above ground.	Potal.	Tons mined - By hand.	From solid -Tons.	Undercut-Tons.	Both methods Tons.
852,474	74,678	6,800	201	1,837	41.	47	135	2,437	927, 152	902,504		
7.935	50C	350	7:	65	21	2	9	97	8,435	N. 435		
1,032,845	439,099	15.318	175	2,366	671	13	336	3,38€	1,471,944	1,302,348		
443.088	27,044	12	194	N51	137	27	N5	1,100	470,132	470,132		
120,837	19.746		207	290	51	20	31	392	140,583	134.851		
2,457,179	561.067	22,486	186	5,409	1,295	109	599	7,412	3,018,246	2,818.570		

SECOND INSPECTION DISTRICT-1910.

FIFTH ANNUAL REPORT.

Counties-Bureau, Fulton, Henry, Knox, Mercer, Rock Island and Warren.

THOMAS HUDSON, Inspector, Galva.

Hon. David Ross, Secretary State Bureau of Labor Statistics, Springfield:

Sir-In accordance with section 12 of an Act of the General Assembly of the State of Illinois, defining the duties of State inspectors of mines, and providing for the better preservation of the health and safety of all persons employed therein, I have the honor of submitting the twenty-seventh annual report of the second inspection district, and the first annual report of the district as now formed, comprising the coal producing counties of Bureau, Fulton, Henry, Knox, Mercer, Rock Island and Warren.

In accordance with your orders the annual schedules or reports from the mine operators, containing the number of tons of coal produced, of the various grades, number of men employed, etc., have been forwarded to the office of the State Bureau of Labor Statistics for tabulation, thus relieving

the State inspectors of mines of a great deal of office work.

This report contains tabular statements of fatal and non-fatal accidents, with a report in detail in regard to the fatal accidents, also tables showing the causes, nature of injuries, duration of disability therefrom with percentages. These tables do not include the 256 men who lost their lives in the Cherry mine disaster November 13, 1909, nor the four men injured at the same time; a report of both the killed and injured has already been forwarded to the State Labor Bureau by the officials of the St. Paul Coal Company.

The report also contains a notice of the shipping mines that have been abandoned, and those of the same class that have gone into operation dur-

ing the year.

A report of the Cherry mine disaster, from the commencement of the fire to the sealing up of the mine and from the reopening of the mine and the exploration thereof, until the recovery of the bodies, is also submitted.

SUMMARY OF ITEMS SHOWN IN THE REPORT.

Number																7
Number																7
Number															17	
Total nu															21	
Number															3,20	
Number															L,96	
Number																

Number employed above ground	705
Total number of employes	8,951
Total tons of coal produced, 2,000 pounds	
Total tons of coal produced, 2,000 pounds	3,000,100
	336,582
Tons of lump coal	2,095,681
Tons of all other grades of coal	1.448,502
Tons shipped on cars at the mines	3.297.969
Tons sold to local trade	401.520
	118,199
Tons applied to lease of the mines	
Tons supplied to locomotives at the mines	05,011
Aggregate value of the total produce\$,175,693
Number of fatal accidents	10
Number of non-fatal accidents	106
Number of employés to each fatal accident	895
Number of employes to each non-fatal accident	84
Tons of coal produced to each fatal accident	388.077
Tons of coal produced to each fatal accident	
Tons of coal produced to each non-fatal accident	36,611
Ratio of fatal accidents per 100 persons employed	1.1

Comparative Table—Output of Counties.

The following is the output of coal of the counties now comprising the second district for the years 1909 and 1910, with the increase or decrease.

Counties.	Total All Grade		Increase.	Decrease.
	1909	1910		
Bureau	1,654,902	1,352,994		301,908
Fulton	2,205,322	1,979,138		203,581
Henry	133,920	135,633	1,713	
Knox	38,172	38,673	501	
Mercer	396,087	302,132		116,558
Rock Island	51,241	61,525	10,284	
Warren	14,612	10,670		3,942
Total	4,494,256	3,880,765	12,498	625,989
Net decrease				613,491

Bureau, Fulton, Mercer and Warren counties show a large decrease in tonnage, while Henry, Knox and Rock Island counties show an increase, but leaves a shortage for the district of 613,491 tons.

MINES ABANDONED.

The following mines of the shipping class have been worked out and abandoned during the year.

The Atlas Coal Company's mine No. 4, located at Galva, Henry county, was worked out and abandoned March 20, 1910.

The Empire Coal Company's mine No. 3, located at Gilchrist, Mercer

county, was worked out and abandoned March 31, 1910.

The East Cuba mine, formerly operated by Meehan and Scrips, located about one mile east of Cuba. Fulton county, has not been in operation during the entire year; it has now been dismantled and the machinery removed from the mine. The coal rights of the company lying south of the T. P. & W. R. R. tracks have been secured by the Eig Creek Coal Company of Cuba. David those lying north of said tracks by the Star Coal Company of Cuba.

NEW MINES.

Two new mines of the shipping class have gone into active operation during the year. The Coal Valley Mining Company's mine No. 3, located at Mathersville, Mercer county went into operation November, 1909, and the Alden Coal Company's shaft No. 7 also at Mathersville, commenced operation in January, 1910.

Mathersville is a new mining town, located on the north side of the Edwards river in Mercer county. The proven coal area contains probably 1500 acres, about equally divided between the Coal Valley Mining and Alden

Coal Companies.

The new shafts of the two companies are located less than half a mile apart. A new railroad the "Rock Island Southern has been built to carry the product of the mines to market." This road commences near Preemption on the line of the C. R. I. & P. R. R. whose lines it has under lease from Rock Island to Preemption and runs south a distance of about 5 miles to the mines at Mathersville and continuing south to the present terminus of the road at Monmouth in Warren county. This road is or will be equipped for both steam and electric service.

Three new auxiliary air and escapement shafts have been sunk during the year, in Fulton county, one of the Norris Coal Company at Norris, 185 feet deep, one by the Star Coal Company at its No. 1 mine at Cuba, 84 feet deep, and one by the Big Creek Coal Company at its No. 4 mine at Dunferm-

line, 87 feet deep.

These shafts are sunk near to the working face of the coal, and are very necessary and substantial improvements. They give an extra exit from the mine in case of emergency, and shorten the airways, thereby increasing the safety of the men employed, and the efficiency of the ventilation.

FATAL ACCIDENTS.

The following is a detailed report of the fatal accidents occurring in the second inspection district not including the Cherry disaster for the year ending June 30, 1910.

August 25, 1909, William R. Oliver, miner, age 17 years, single, was severely crushed through the body by falling with a rapidly descending cage in John Myers, now J. A. Kings' local mine, located near Victoria, Knox county. Deceased with two other miners got on the cage to go down the shaft, which is 67 feet deep; just as the cage started from the top of the shaft, the brake on the drum failed to work, and the cage dropped suddenly to the bottom of the shaft, injuring Oliver fatally, and the other two miners slightly. It may be said by way of explanation, that this is a single shaft, that is, there was only one cage way and one cage. The loaded cage was hoisted to the surface by horsepower, then the drum was thrown "out of gear" and the empty cage and car lowered to the bottom by means of a brake on the drum. This brake band slipped down under the drum and failed to work when needed. Deceased received internal injuries from which he died twelve hours after the accident.

Septembr 7, 1909, Wm. Charango, top laborer, aged 31 years, married, was hurt internally by falling astride of a rail on the dirt dump at the top of the mine at the Alden Coal Company's shaft No. 6, located near Norris, Fulton county. Deceased was employed as an outside laborer, he was engaged in unloading a car of dirt on the dirt dump, this dump is elevated about four feet above the surface of the ground; by some means he lost his balance and fell astride of the rail receiving internal injuries. He was removed to the hospital at Peoria the 8th and operated on, and died from the injuries sustained September 20, thirteen days after the accident. Deceased was a Lithuanian by birth; he leaves a widow and three children in the

Old Country.

November 12, 1909, John Richardson, shot firer, aged 30 years, married, and Everett Ogden, aged 31 years, single, also a shot firer, were burned,

bruised and killed almost instantly, by a powder and dust explosion in the Alden Coal Company's mine No. 6, located near Norris, Fulton county.

The two men who lost their lives in this explosion were employed as miners and shot firers in this mine. The shaft was comparatively new, and few miners employed; each of the men had a working place in the mine and fired the shots after the other miners were out of the shaft. From the best evidence obtainable the explosion originated in the main west entry in which Ogden, one of the men killed, was working. He seems to have drilled two holes, each about six feet in depth, four feet apart, and parallel to each other and to the side of the entry or rib and about three feet dead or drilled beyond the free face of the coal. One of the shots exploded and it is supposed to have caused the explosion, the other shot although lighted, failed to go off. In the unexploded hole which was six feet in depth and three inches in diameter, was found about four feet of powder and two feet of tamping consisting of drill dust. Had the first hole not caused the explosion, the second one would have almost likely done so. Richardson leaves a widow and three children.

November 22, 1909, Edward Wyatt, shot firer, aged 41 years, married, was severely burned and bruised by an explosion of powder and dust in the A...en Coal Company's mine No. 6, located near Norris, Fulton county and died in the hospital at Canton from the injuries received, November 25th, three days after the accident.

This explosion in which Wyatt lost his life was similar in every respect to the one which took place in the same mine ten days' previous; a hole drilled too deep into the solid or dead and overcharge of powder, and tamped with drill dust and a little dust near the face and on the roadway is all that is necessary to produce an explosion. Deceased leaves a widow and one child.

Andrew Bugas, partner of Wyatt's was quite severely burned about the head and arms by the explosion, but has since recovered.

December 6, 1909, Paul Novocera, company man, aged 27 years, single, was severely crushed by a falling of roof in the Big Creek Coal Company's mine No. 2, St. David, Fulton county. Deceased was working on the night shift. About three o'clock on the morning in question while working with a partner fired a blast for the purpose of blowing down the roof to make the entry of proper height for haulage purposes. The blast did not bring down the roof, but left it hanging in a dangerous condition. Deceased in opposition to the advice of his partner, went under the hanging roof, when it suddenly fell, crushing him about the head and shoulders. He was taken to the hospital at Canton, where he died from the injuries December 11, five days after the accident.

December 28, 1909, Charles H. Curtis, miner, aged 35 years, married, had his back broken by falling coal, in the Coal Valley Mining Company's mine No. 2, located at Sherrard, Mercer county. Deceased had driven a cross cut from the room in which he was working to the room adjoining, a distance of about 20 feet, leaving a layer of top coal about six inches thick; while in the act of taking down this top coal a large slab of coal about thirteen feet long, five feet wide and six inches thick suddenly fell, crushing him to the floor of the mine. His back was broken, and he died from the injuries about two hours after being removed from the mine. He leaves a widow but no children in England.

January 9, 1910, James Watts, night foreman, aged 50 years, married, was killed instantly by a fall of roof on the entry, in the Norris Coal Company's mine, Norris, Fulton county. Deceased about ten o'clock p. m. on the above date, was taking a carload of props into the third east entry, west side, and while passing along the entry, a large mass of roof six feet long, four feet wide with an average thickness of about seven inches suddenly fell, crushing him against the car of props. He leaves a widow but no minor children.

January 28, 1910, Joseph Budweil, miner, aged 25 years, single, was severely burned by the explosion of a keg of powder, in the Maplewood Coal Company's mine No. 2, located near Farmington, Fulton county. De-

ceased from the meagre and belated details furnished by the company poured some powder out of a keg into an open can. He had a new coil of fuse, and in order to test it, lighted a small piece, and threw it from him, the burning fuse fell into the can, exploding the powder, which in turn, exploded the powder in the keg. He was severely burned about the head, arms and body, and died from the burns January 31, three days later.

March 19, 1910, Alexander Close, miner, aged 28 years, married, was severely burned about the head, arms and body by the explosion of a keg of powder in the National Coal Mining Company's mine No. 1, located at Middle Grove, Fulton county. Deceased at 3:30 p. m. on the above date, went into an adjoining room, in which Mike Moretto worked to borrow a charge of powder, Moretto had a full keg unopened and took a pick and deliberately struck it into the full keg of powder, a spark was generated by the steel point of the pick coming in contact with the Aeg and of course an explosion followed. Close died from the burns received March 24th, five days after the accident. He leaves a widow and one child. Moretto was severely burned and for some time his life was despaired of, but later accounts are that he is improving and will ultimately recover.

In addition to the above fatal accidents, I think it well to report two cases where death took place in mine No. 3 of the Spring Valley Coal Company, Spring Valley; one was a determined case of suicide, the other, a case of

death from natural causes.

December 13, 1909, Mike Balserus, a miner, aged 53 years, married, leaves a widow and two children in Russia and one child in America, dropped dead in the 45th° off the main north entry in this mine. While coming out from his work he was seen to stagger and fall, and died almost instantly. The coroner's jury returned a verdict of death due to heart disease.

January 25, 1910, Louis Bosetti, a miner, age not given, single, was killed instantly by jumping down shaft No. 3. The coroner's jury at the inquest returned a verdict of death due to jumping down the shaft while tempo-

rarily insane.

THE CHERRY MINE DISASTER.

This report covers incidents and occurrences which took place at the St. Paul Coal Company's mine No. 2, located at Cherry, Bureau county, Illinois, from November 13, 1909, when the fire started, until the morning of November 25, 1909, when both main and air shafts were securely sealed, and covered with concrete, to more quickly extinguish the flames known to be raging below in close proximity to the main shaft.

From the most reliable reports to be obtained at the mine, the fire commenced at or about 1:30 p. m., on Saturday, November 13, 1909. The place where the fire started, was at, or quite near the landing place, in the airshaft, at the second vein, where the coal from the third vein is hoisted through said airshaft and taken off the cage at the second vein, and hauled around to

the main shaft, recaged and hoisted to the surface.

The cause of the fire, from information gleaned at the mine, was, a pit car, containing five or six bales of hay, intended for the third vein was sent down the main shaft, and hauled around in the second vein to the air shaft landing above mentioned. This pit car, containing the hay, was placed near, probably directly under a blazing open torch, placed there to give light to the cagers, consisting of two men and a boy. The oil burned in this torch was quite likely kerosene, it is also very possible that some of the oil dripped from the torch and fell on the hay in the pit car, at all events, the hay is supposed to have caught fire from the torch, and certainly could have been easily extinguished, if immediate steps had been taken to do so. The car of burning hay, however, seems to have been pushed around from one position to another in an air current having a velocity of about 700 feet per minute, until it had fired the overhead timbers. The car containing the burning hay, was finally pushed into the shaft opening, and fell into the "sump" at the third vein, where it was quickly extinguished; but the heavy

pine overhead timbers at the second vein were by this time on fire, and could not be reached because of the dense smoke; by this time the control of the fire was lost, and the result was the worst mine disaster of modern times.

Late Saturday night and early Sunday morning November 14, the mine inspectors of Illinois began to arrive at the mine. This force was augmented later by mine inspectors from other states; one came from Indiana, two from Ohio, two from lowa and one from Missouri. Professional experts from Pittsburg and Champaign experimental stations, and about a dozen firemen from the Chicago fire department, were also on the ground. During the day, Sunday 14th, two men from Champaign with helmets, succeeded in reaching the second vein through the airshaft in a sinking bucket, but could do nothing more as the smoke and steam were too dense for exploration. Both shafts were covered over and remained so during the night.

Monday, November 15: Men with helmets again descended the air shaft, they reported the temperature fairly comfortable but smoke and steam still too dense for active work. It was then decided to case the fan temporarily as an exhaust (the fan casing having been destroyed and the babbit metal melted out of the journals, when it was reversed from a blower to an exhaust during the early stage of the fire) start the fan and attempt a descent into the mine through the main shaft. This was done, and the main shaft uncovered. The air shaft now became the upcast, and men wearing helmets went down the main shaft, the cages in this shaft being in good working order; when they got to the bottom, or second vein, they found the fire raging and were forced to return to the surface; the fresh air admitted by making the main shaft the downcast had started the partially subdued fire into a blaze. Both shafts were then covered over, and remained so during the night.

Tuesday, November 16: Both shafts remained covered over during the day, which was spent mainly in taking the temperature of the mine by lowering a therometer to the second vein, and in every case, the bottom of the main shaft at this vein was found too hot for work of any kind.

of the main shaft at this vein was found too hot for work of any kind. Wednesday, November 17: Temperatures were again taken and found to be about the same as on the day previous. A conference was held by the Inspectors of Illinois with those from Ohio, Iowa, Indiana, Missouri and the mining experts from Pittsburg and Champaign, also the representatives of the Coal Company. It was decided to again have men with helmets go down the air shaft; they descended about 9 p. m. and found the temperature more favorable and no fire in sight; of course men did not leave the sinking bucket in which they descended. During the night a "float" or temporary cage was constructed for use in the airshaft, should exploration work be again attempted from that point.

Thursday, November 18: The main shaft was uncovered late that day, and a line of hose put down to the second vein, and fire fighting in earnest commenced; this was done principally from the north cage as fire was blazing on the south and east sides of the shaft, which prevented firemen from leaving the cage. The men with helmets during the day went down the air shaft on the "float" and recovered one body that had been seen on a previous trip. Fire fighting was kept up constantly at the main shaft dur-

ing the night.
Friday, November 19: Progress was made, advancing on the west side shaft parting at the second vein; four bodies were found and brought to the surface. The Chicago firemen were in charge of the fire fighting below. The east and south sides of the shaft bottom were inaccessible, owing to heavy falls of roof and burning timbers, the west side of the shaft only being open. During the day explorers got around on the south entry, and then east to a point not far from the bottom of the air shaft in the second vein, but falls of roof had to be cleaned up, and repairs made in the timbering, this was ordered done during the night. In the evening after a conference, the Inspectors from other states and seven of the Illinois In-

spectors returned to their home; three of the Illinois Inspectors remaining This action was taken because the inspectors considered that the company had a sufficient number of able men on the ground to take care of the situation.

Saturday, November 20: The fire was now seemingly under control, that part at least which was accessible from the bottom of the main shaft; the heavy falls of roof on the east side of the shaft, probably 35 feet high were loaded out and the smouldering fire quenched as it was reached.

At 10:30 a. m., the three Illinois mine inspectors remaining over from the day before left the mine, urgent business in other parts of their respective districts calling them away; one of them having a mine explosion that had occurred the previous week, to investigate, by which, two shot firers had been killed.

It was shortly after noon on this date, when an exploring party found twenty-one men alive in the first west off of the main south entry. The imprisoned men had built "stoppings" thereby shutting out the foul gases from the fire, and depending on the purer air in the inclosed space to sustain life; they were at once removed from the mine, all but one recovering.

Telegraph messages were sent to all the Illinois inspectors and they hurried back to the mine; several of them arriving within a few hours. During the night explorations were made in the east entries off of the main south.

Monday, November 22: The exploring of the south section of the mine continued through the day, about 100 dead bodies were taken out of that

part of the workings.

Tuesday and Wednesday, November 23 and 24: On these dates the first northwest entries were explored, the face of the entries were reached but no bodies were found; it was learned later, that all of the men got out of this part of the mine; it was also found that there was no connection between the northwest part of the workings, where the exploration was made and the north part of the workings on the east side of the shaft, where many men were known to be at work the day the fire started.

While the explorers were in the northwest entries, smoke was found issuing from the main passageway which connects the west shaft parting with the air shaft, and which was closed by a fall of roof and a temporary stopping: the explorers in the northwest section were hastily recalled, when the temporary stopping was pulled down, and a stream of water from the fire hose turned in, and all signs of fire subdued at that point, and a more substantial stopping put in during the night.

About 2 o'clock a. m., Wednesday, the 24th, a party of four went down into the third vein, on their return they reported from 3 to 4 feet of water covering the floor of the mine in the lower parts of the workings, and that they had found groups of men in the dry parts, all dead. Pumps were being made ready in the meantime to remove the water, partially at least, from the third vein workings so that the bodies could be recovered.

During the succeeding few hours, however, it was noticed that the fire from the south and east sides of the main shaft, was slowly encroaching on the shaft itself. Holes were cut in the shaft lining as high as 30 feet from the bottom, and streams of water thrown in behind the shaft lining; but the steam and smoke continued to issue from the openings cut and also from the sides of the shaft, in increasing quantities; to offset this a board stopping was built around the south and east sides of the shaft, and as close thereto, as the working of the cages would permit, and a stopping closed tight, near the bottom of the air shaft. The object of this was to deaden, or partially subdue, the fire thought to be burning between those points; this, however, was not entirely successful as the smoke from behind the shaft lining, which formerly passed to the east and around to the upcast or air shaft, was now carried to the west side of the main shaft, and the rescuers there practically driven from the mine.

A strong smell of coal smoke was noted indicating that the coal pillars were on fire, and as the gases given off by burning coal were known to be dangerous, great caution became necessary. Sometime shortly after midnight on the morning of Thursday, November 25, a consultation was held, at which, the President of the State Mining Board, chief of the fire department; expert helmet men from Champaign, the Illinois mine inspectors and representatives of the St. Paul Coal Company were present. The situation was discussed from every possible point of view, and it seemed to be the unanimous opinion of all present, that all of the men in the mine were dead; and the best way, looking to the recovery of the bodies later, was to seal up both of the shafts while they were in this condition, to be entered as soon as the fire was extinguished.

The sealing of the shafts was commenced early Thursday morning November 25th. A two inch pipe was inserted in the concrete cover of the main shaft, so that the temperature, pressure and condition of the air from the mine could be obtained at short intervals, and the exact conditions of the underground workings of the mine underground.

REOPENING OF THE CHERRY MINE.

Both shafts of the Cherry mine were securely sealed over with steel rails and concrete on the morning of November 25, 1909, and remained sealed

until February 1, 1910.

During this interval, daily readings of the temperature in the main shaft had been taken, and were found to range from 123° on November 29, four days after the shaft was sealed, to 121° December 1; 93° December 10; 84° December 20; 74° December 30; 70° January 10; 68° January 29, and the same on February 1, when the shaft was opened; this was assumed to be the normal temperature of the mine under existing conditions.

In the opening up the main shaft, an aperture about three feet square was cut in the concrete covering, just above the cover of the north cage, which had been left suspended directly under the concrete cover when the

shaft was sealed; the south cage had been taken off.

The same day this opening in the concrete cover, two men, Webb and Moses, wearing oxygen helmets, were passed on to the cage and lowered to the second vein. After an investigation around the bottom they were hoisted to the surface, and reported conditions just about as they were when the shaft was scaled up, except, no signs of fire nor smoke were visible, and the temperature at the bottom of the shaft normal and quite comfortable to work in. They descended a second time, and brought up a sample of air for analysis in which "black damp" or carbon dioxide predominated.

Late in the same afternoon, the concrete covers from both the main and the air shafts were removed, and the fan started up as an exhaust, that is, the fresh air was drawn down the main shaft and up the air shaft. It might be stated here that the Capell fan, which had been warped and twisted with the heat during the fire, had been taken away and thoroughly repaired and

again put in position and cased in a substantial manner.

After a short interval, to allow the fan to clear the passage or west "run-around" between the main and air shafts, two of the State inspectors, with safety lamps, descended the main shaft, and found a good current of air passing from the main or downcast, towards the air or upcast shaft. They returned to the surface and reported the mine in a safe condition for workmen with naked lights to enter, which they did, and during the night repaired and reinforced the brattice around the east and south sides of the main shaft, also commenced to clean out the west passageway or "run-around" to the air shaft which was found in a very bad and dangerous condition, owing to falls of roof broken timbers, etc.

It was considered, that the best and safest method was, to employ only a limited number of men underground, a number just sufficient to open up the west passageway to the escape and air shaft. After this road is opened and the air shaft put in order to take men out of the mine, an escapement or two ways out of the mine will be available. This will make men working below feel more safe, as it is not likely that fire can break out at both

shafts at the same time. The cleaning out and retimbering of the west passageway to the air shaft continued to be slow and dangerous work impeded as it was, by heavy falls of roof. By a good ceal of hard and dangerous work, a small opening was made over, under and by the side of the falls in the west passageway to the bottom of the airshaft, and through this opening boards were taken and a "stopping" put in on the north side of the air shaft to prevent any sudden breaking out of fire from that direction.

Cleaning up and retimbering between the two shafts continued, care being taken to keep a close watch on all stoppings to prevent leaks or a sudden

breaking out of fire.

The body of a man that was known to be lying at the second vein landing at the air shaft was brought to the surface February 14, in a sinking bucket.

February 5: A large steam pump was sent down the main shaft to the second vein. An extra covering of brattice was put around the east and south sides of the bottom of the main shaft at the second vein. The concrete was shipped away from around the collar of the airshaft, and a "float" put in, and suspended just below the surface, ready for carpenters to make

permanent repairs to the burned out portion of the air shaft.

February 6: The west passageway from the main to the air shaft was now cleaned out and securely timbered and open for the passage of pit cars. An entry is being drawn in the shaft pillar around the north side of the main shaft and the heavy fall of roof on the east bottom, to connect again with the shaft bottom on the east side, inside of the burned out timbers and fall. This entry will give access to the east and northeast sections of the mine and to the air shaft by way of the west passageway. Men were cleaning up the main south entry on the west side to recover rails, ties, pit cars and other material. The use of the cages in the main shaft were taken up most of the day by workmen making pipe connections for "steam jets" to throw water from the third vein to a tank located at the second vein, where it is taken up by the steam pump at the second vein and thrown to the surface. The emergency cage at the third vein, main shaft, was hoisted to the second vein and reduced to a size suitable to allow the steam jets to pass to one side of it.

February 7 and 8: Work in the mine was progressing slowly; cleaning up the south entry, west side; driving the entry around the main shaft and fall on east side, also fitting water and steam pipes in the main shaft for

pumps and injectors.

February 9 and 10: When steam was turned on to the injectors and pump the heat caused the pipes to expand, they were thrown out of line and were struck and broken by a descending cage. A concrete stopping was put in on the second east entry, west side, near the bottom of the airshaft.

February 11 and 12: The pipe line was repaired and started up but was

February 11 and 12: The pipe line was repaired and started up but was broken again but repaired, and at 8 a. m. the 12th both pump and injectors were working steadily and doing good work. The entry around the main shaft was driven in 120 feet and has about 70 feet more to be completed.

February 13 and 19, inclusive: The work done during the week consisted in holding the entry into the main bottom, east side, and putting a concrete stopping across the main bottoms inside of the east opening, to the mule stables; cleaning up heavy falls of roof on the main north entry, east side, and in the east passageway or runaround to the air shaft.

Fifteen bodies were recovered during the week; all were found near where the new entry connected with the main bottom inside of the large fall

thereon.

The shaft timbers in the main shaft were again giving off considerable smoke and heat, showing quite plainly that the fire was smouldering behind them, and in dangerous proximity thereto., Pumping from the third vein was suspended until more brattice could be put around the bottom of the main shaft to keep back the fire.

February 20 and 21: The pump and injectors were still idle, as the steam given off prevents a close watch for fire being observed on the main shaft. Three more bodies were recovered on the 21st; they were found just outside

of the second door going south in the east passageway to the escape shaft. The pumps and injectors were started again but shut down later, because of the smoke and heat from the shaft lining.

One more body was found on the evening of the 23d under a large fall

of roof, on the main north entry, east side.

February 24: Good work was being done in repairing the burned out lining and partition in the airshaft; in two or three days the work of putting in the burned out stairway from the second vein to the surface will be completed. The east passageway to the air shaft is cleaned up and retimbered and in shape for the hauling of pit cars.

February 27 to March 5: During the week ending March 5th cleaning up of the north entry, east side was continued, and sixty-five bodies in that

section of the mine were recovered.

It is quite probable that all of the bodies in the 2d vein have now been recovered, except perhaps some that may be covered up by "falls" on the shaft bottom or parting on the east side, or in the direct passageway, from

the shaft parting on the west side to the air shaft.

March 6 to 13: The northeast workings of the second vein, were quite thoroughly explored, and rails, pit cars and other material taken out; pumping water from the third vein was continued. An injector was put in at the air shaft, to raise the water from the third vein to the second and a pump was installed at the second vein to raise the water to the surface, both were working in a satisfactory manner. The water at the air shaft in the third vein was reported to be two inches below the "door heads" on March 9th; on this date, the main shaft was again giving off heat and smoke, so much so, that all of the men also two mules were brought out of the mine, and carpenters again put to work patching up the brattices. A wooden form was put around the east and south sides of the main shaft, and about ix inches of sand bedded therein to shut off the smoke. The sand packing proved successful, the smoke being practically shut off. The injectors and pumps at both shafts were in operation, the water at the bottom of the air shaft in the third yein was nine inches below the door heads March 13.

March 13 to 26: There was not much work during the past two weeks except the pumping of water from the third vein. March 26 two and a half

feet of water was above the rail at the bottom of the air shaft.

March 27 to 29: The water was fairly well removed, a cage was prepared to hoist rock from the third vein to the second at the air shaft; large falls of roof were encountered both north and south. The pump at the third vein, bottom of the air shaft was started up and was working fairly well; this pump had been submerged since the sealing of the mine, November 25th.

March 29: Richard Newsam, president of the State Mining Board, and four State inspectors of mines, some of whom had been on duty continuously since the opening of the mine February 1st, went down from the second and the third vein on the emergency cage at the main shaft. They found about two and one-half feet of water at the cage landing; the shaft bottom, east and west, also the mule stables, where heavy, permanent timbering had been done were all found standing intact. After leaving the main bottom, however, large falls of roof were found; in fact, the entries around the shaft pillar, in every direction were practically closed. This condition required a great deal of time and labor, before the bodies known to be in the third vein were reached.

April 1 to 6: The work of cleaning up the falls in the north section of the third vein was continued. Connections having been made between the

main and airshafts, at the third vein.

April 7: Mine Inspector McAllister, mine manager Frew and John Fraser, a shift foreman, by climbing over falls, broken timbers and other obstructions, located the bodies of the men in the third vein. They were found at the end of the north air course, running direct from the bottom of the air shaft, just at the north boundary of the shaft pillar. Workmen were at once started to clean out the air course, north from the main shaft bottom, as this was the nearest and quickest way to reach the bodies.

April 10: One body was recovered from the third vein; April 11, thirty-five bodies were taken out; April 12, fifteen bodies were taken out, making fifty-one bodies in all taken from the third vein.

The bodies of these men were found comparatively close together within a radius of not more than about 100 feet. According to the record of F. P. Buck, the clerk in the office at the mine, ten or twelve men are still missing, but as five men have been located, working at other mines, who were supposed to be lost in the Cherry mine, some of the missing men may be found in like manner. However, if any more bodies are in the mine, they will be found as the cleaning up process progresses.

The four State inspectors, who had been on duty by relays since the opening of the mine, February 1st, considering they could be of not further service, or not until the fire area should be broken into, left for their homes

April 13, 1910.

OPENING OF THE FIRE AREA AND SECURING THE SHAFTS IN THE CHERRY MINE.

After the recovering of the bodies from the third vein April 12, about thirty days were consumed in removing the pit cars, track, timber and everything of value from the interior workings of the second vein, it having been de-

cided by the company to abandon that seam permanently.

May 14: After a narrow entry had been driven through the shaft pillar on the west side, to connect with the pump room an opening about 12 feet wide, and 70 feet in length, running from the south end of the main shaft to the stable in which the fire was known to be burning; another opening was made into the pump room, where a good deal of fire was in evidence, especially the coal "ribs" which were actively burning, but with an abundant supply of water, under a 300 foot head, and the necessary hose connections, the fire was easily kept under control, and the shale roof which had fallen to a height of fully 30 feet, was loaded into pit cars and sent out of the mine.

As soon as a sufficient space was cleaned, two sets of heavy timbers were set up, and on top of these "cogs" were formed and built up to the top, and

the roof secured.

The building of the "cogs" were most difficult and dangerous; difficult, because of the intense heat, which was more intense as the "cogs" were placed higher; and dangerous because of the unreliable nature of the roof,

large slabs of which fell or were liable to fall at all times.

The heat was partially overcome by putting a small air compressor into operation and carrying compressed air down the shaft in pipes and thence through hose to the men at work. As soon as sufficient space was cleared, and the roof temporarily secured by "cogging," a base for concrete dams or stoppings was formed by cutting down into the floor and into the sides of the opening or entry, and a concrete stopping built, quite close to where the pump room connected with the stables. The same methods described above were used in breaking into the fire area on the shaft bottom, east of the main shaft, and on the north side of the air shaft.

The conditions encountered were similar in each case, but differed somewhat in degrees; that is, more fire was found on the main shaft parting

than in the pump room and less north of the air shaft.

After the fallen roof had been removed from around both shafts, the work of thoroughly securing the same with concrete was commenced. On the east side of the main shaft a heavy wall or "backing" of concrete was built against the shaft timbers, and at right angles thereto; three walls of concrete one on each rib and one in the center were built to connect with a concrete stopping about 28 feet east of the main shaft. These walls are built to within about a foot of the roof, about 30 feet high, and across them are laid steel rails and wedges driven between the rails and the roof, thoroughly securing the latter.

Openings are left in the concrete walls around both shafts, to admit the passage of any one desiring to examine or inspect the walls and stoppings.

Practically the same methods as described above, are used to secure the south side of the main shaft, and the north side of the air shaft. The "old works" of the second vein are completely cut off from the main shaft by permanent stoppings and a new entry has been driven around the main shaft, and through the shaft pillar to the air shaft.

Through this entry, pipes are laid connecting the "rings" in the airshaft, which gives of abundance of water, with a concrete reservoir built near the main shaft at the second vein. From this reservoir the third vein will obtain its water supply for fire fighting purposes. The distance between the two veins being 160 feet, the pressure due to the altitude will be about 80

pounds per square inch.

During the week ending August 13th, steel guides were put in between the second and third veins, new ropes put on and the cages running down to the third vein; and the cleaning up well underway. September 3, the cleaning up had progressed so far, that the coal face had been reached at five or six different points, and it is fair to assume, that by October 1, 1910, the mine will again be in a coal producing condition.

Note—On July 7th the body of a man was found about 10 feet north of the air shaft, under a large fall of roof. In regard to the number of men lost, and number of bodies recovered, the following statement was received from an official of the St. Paul Coal Company.

> Thos. Hudson, State Mine Inspector, Second District, Galva. Ill.

Respectfully submitted,

Fatal Casualties—Second District—July 1, 1910.

Date.	Name.	Age.	Occupation.	Residence. (Town.)	Married.	Single.	Widow.	Children.	Dependents.	Cause of Accident.
1910 Jan. 9	James Watts Joe Budweil	50 25 28	Night foreman Minerdo	Norris	1 1 1	··	1 1 1	 'i	1 2	*Falling cage. †Fell astride rail Powder and dust expl'n .dodofodofo. Falling roof Falling coal Falling roof Explosion loose powder Explosion keg powder

^{*} Died 12 hours after accident. † Died 13 days after accident.

Fatal Casualties, Cherry Mine Disaster—Bureau County—Second District.

Date.	Name.	Age.	Occupation.	Residence. (Town.)	Married.	Single.	Widow.	Children.	Dependents.	Cause of Accident.
13 13 13	Amider, Alfio Agramanti, Foliani Alexius, Joseph Atalakis, Peter	28 34	do	dodo	1	1 1 1 1	i	2	3	dododododo
13 13 13 13	Atalakis, G	18 32 33 31	do Trackman do Miner	dododododo	 1 1 1	1			4	do
13 13 13 13	Brain, Oliver. Burslie, Clemento. Bolla, Antonio. Bastia, Mike. Brown, Thomas.	40 34 24 28	dod	dodododododo	1 1 i		1 1 1	2 3 i	2	.do
13 13 13	Bolla, Peter Bawman, Frank Bawman, Lewis Barozzi, Antone Bruno, Edward	28 31 26	dododo	dodo	i	i 	i	1 1 3	₂	.do
13 13 13	Bredenci, Peter Budzon, Joseph Boucher, Jerome Bakalar Geo Bayliff, Thomas	30 39 25	. do	do	1		1 1 1 1 1	2 2 1 1 2	3 2 2	do
13 13 13	Bernadini, Chas Bosviel, Adolph Budzom, Chas Bertolioni, Tonzothe Benossif, J	$\frac{33}{30}$ $\frac{22}{22}$	do	dododododo	1 1	i 1	1 1 1	1 2 1	3 2	.do .do .do .do .do

Date.	Name.	Age.	Occupation.	Residence. (Town.)	Married.	Single.	Widow.	Children.	Dependents.	Cause of Accident.
1909										
Nov. 13	Butilla, August	32	Miner	Cherry		1	• • • •	• • • •		Mine fire
13	Betot, John	40	Trackman	do	1		1	4	. 5	do
13	Bordesona, Joseph Betot, John Brown, John Buckels, Richard	33	Cager	do		I			* 2	do
10	Duckers, Michard		Spragger		1	1		-	. 3	
13	Bruzis, John. Bundy, John. Costi, Angelo. Ciocci, Peter. Canov, Canivo.		Timberman	do						do
13	Costi, Angelo	23	Miner	do		i				do
13	Ciocci, Peter	24	do	do		1	;			do
13	Canov, Canivo	33			1	• •	1	2	3	do
13	Cioci, Canical. Costi, Lewis. Camilli, Frank Casserio, John. Castoinelo, Chelsto	22	do	do						do
13	Costi, Lewis	36	do	do	1	1				do
13	Casserio, John	26	do	do		1				do
13	Castoinelo, Chelsto	27	do	do	1	• •	1	2	3	do
13	Cagoskey, John	56	do	do	1		1	3	4	do
13	Chebubar, Joseph	32	do	do	1		1	4	5	do
13	Conlon, Henry	21	do	Cherry		1			*3	do
13	Cagoskey, John. Chebubar, Joseph Casollari, Elizio Conlon, Henry Cohard, Henry	34	do	do	1		1	3	4	do
13	Cipola Wike	40	do	Streator	1		1	3	4	do
13	Clark, Robt	28	do	Scotland		1				do
13	Carlo, Elfi	28	do	Cherry		1				do
13	Cipola, Mike	45	do	do	i			3	3	do
19	Commono Tohm	22	do	Champy	1		1	4		do
13	Debulka, John	27	Driver	do	1	::	1		1	.do
13	Dovin, Andrew	49	Miner	do.:	1		1	8	9	do
13	Compasso, John Debulka, John Dovin, Andrew Donaldson, John Dovin, George	18	do	do	1	1	1	3	4	do
	Demesey, Fred Dumont, Leopold. Detourney, Victor Denalfi, Francisco. Durand, Benjamin.	1								
13	Demesey, Fred	29	do	do		1		• • • •		do
13	Detourney, Victor	36	do	do	1		1	3	4	do
13	Denalfi, Francisco	30	do	do	1		1	1	2	do
10	Durand, Benjamin.	20			,			1	-	
13	Dunko, John Durdan, Andrew Davis, Jno. G Elario, Miestre Elko, George	22	do	do	1		1	1	2	do
13	Davis, Jno. G	17	Trapper	do		i				do
13	Elario, Miestre	24	Miner	Cardiff		1				do
13	Liko, George	18	do	Austria	• • • •	1				
13	Eloses, Peter	23	do	Italy		1				do
13	Erickson, Chas	55	Timbormon	Cherry		1				do
13	Farlo, John	30	Miner	do		1				do
13	Eloses, Peter Erickson, Chas Erickson, Eric Farlo, John Fayen, Peter	40	do	do	1		1		1	do
13	Forgach, John	34	do	do	1		1	4	5	do
13	Freebirg, Ole	35	Timberman	do		1				do
13	Francisco, John	23	Driver	do	1	i		9	10	do
13	Forgach, John. Freebirg, Ole. Francisco, John. Francisco, August. Governer, Jno.	42	Miner	do	1	١	1	3	4	do
13	Grehaski, Andrew	49	do	Streator	1		1	6	7	do
13	Guglei'm, Peter	34	do	Cherry	1		1	2	3	do
13	Garletti, J	29	do	Cherry	1					do
13	Grehaski, Andrew. Guglei'm, Peter. Garletti, J. Guidarini, Jno. Gialcolzza, Angone.	33	do	Cedar Point	1		1	4 2	3	do
19	Garabolda Ino	25	do	Italy	1					do
13	Garabelda, Jno Gulick, Joseph Gwaltyeri, Jalindy Garletti, Jno Geckse, Frank.	34	do	Cherry	1	::	i	3	4	do
13	Gwaltyeri, Jalindy	28	do	do						do
13	Garietti, Jno	19	00			1		6	17	

Date.	Name.	Age.	Occupation.	Residence. (Town.)	Married.	Single.	Widow.	Children.	Dependents.	Cause of Accident.
1909 Nov. 13 13 13 13 13	Grumeth, Frank Gibbs, Lewis Halko, Mike Hadovski, Steve Howard, Samuel	34 34 28 28 20	Miner. Timberman Minerdo do	Cherrydododododododo	1 1 1	i	1 1 1	2 1		Mine fire
13 13 13 13	Hudar, Jno Hyhds, William Hertzel, Jno Halofcak, Dan Rescued Nov. 20; died 48 hours after. Harpka, Joseph	45 25 39 45	do	do			1 1 1 1	6 1 8 8	9	.do
	Hainant, August Howard, Alfred James, Frank Janavizza, Joe Jamison, James				1	i	1 i	1 1	2	do
13 13 13	Klemiar, Thomas Kanz, Jno Kussner, Julius. Klaeser, Jno Klemiar, Richard	30 41 24	dododo	dododo	i		1 1 1 1	4 2	3 1	.do
	Kometz, John Krall, Alfred Krall, Henry Kroll, Alex. S Kenig, John						1 1 1	3 4 6	5 1 7	. do
	Klemiar, Geo Korvonia, Joseph Korvoeivio, Frank Korvonia, Antone Kutz, Paul.					i	1	2 1 2	3 2 3	do
	Kliklunas, Dominick Love, James. Leyshon, Chas Lukatchko, Andrew Leptack, John					1	1		2	do
13	Lonzotti, John Love, Morrison Love, John Love, David Leynaud, Urban	37	do	Cherry	i		1	2 2 2 3	3 3 4	do
	Lonzetti, Seicomo Lallie, Frank. Lurnas, Mike Leadache, Joseph Leadache, Frank.									do
13	Leadache, James Mumetich, Hasan Miller or Malner, Lewis Miller or Malner,	15				1				dododo
13	Joseph Miller, Edward	33	do	do	1		1		3	do
13 13 13 13 13	Mokos, Joseph Meicora, Joseph Mohahan, James R Mills, Edward Mekles, Tony	43 36 62 44 54	do do do do	dododododododo.			1	3	4	do

Date.	Name.	Age.	Occupation.	Residence. (Town.)	Married.	Single.	Widow.	Children.	Dependents.	Cause of Accident.
1909 Nov. 13 13 13 13 13	Merdior, Arthur Marchiona, Frank Marchiona, Archie Maceoha, Jno Mills, Arthur	26 32 52 26 29	Minerdododododododo	CherryOld country	1 1 1 1 1 1		1 1 1 1	i	2 1 2 3	Mine firedododododododo
13 13 13 13 13	Mittle, Jno	37 27 25 26 27	do	do do Scotland	1 i	1 1 1	1 i	3 · · · · · · · · · · · · · · · · · · ·	3	dododododododo
13 13 13 13	McGill, Jno., Jr McCrudden, Jno McCrudden, Peter McMullen, Geo	17 25 48 24	.dodododo	Cherry	i i	1	 1 1	4 2	5	do
13 13 13 13 13	Mani, Joseph	56 39 31 22	do	dododoSpring Valley	1 1 1	i	1 1 1 	2 5 5 3	3 6 6	.dododododododo
13 13 13	Matear (or Mactear), Wm Norberg, Alex Norberg, August Ossek, Donaty Ossek, Martin	30 37 34	do Mine mgr Timberman	dodo	1		1	2 3	1 3 	. do
13 13 13	Ondurko, Matt Olson, Chas. P. Palmiori, Albert Prusitus, Perys Prusitus, Peter	50 39 38	dododo	Cherry	1	1	1 1 1 1	5 7 4 4	6 8 5	. do
13 13 13 13 13	Pavoloski, Jno Pressenger, Joseph Prich, Joseph Pearson, Alex Perono, Dominick	27 33 38 30 32	.do	. do	1 1 1 	i	1	3	1	dodododododod
13 13 13 13 13	Papea, Chas	33 37 49 37 35	do	.do		i	 1 1	 6 2	7 3	do
13 13 13 13	Pshak, John Pauline, Antona Repsel, Martiu Repsel, Joseph Rodonis, Joseph	42 26 36 29 33	Timberman Driver Minerdodo	Cherry	1 1 1 1				0	.dododododododo
13 13 13 13 13	Rolland, Victor Rittle, Frank Richards, Thomas Ricca, Cegu Riva, Joseph	18 37 21 30 27	. do	CherrydoItaly.	1	1	1 1	2	3	. do
13 13 13 13 13	Raviso, Joe Ruggesie, Gailamyo. Rossman, Robert Ruygiesi, Frank Rimkus, Joseph	25 17 21 27	do	Cherrydododo		1 1 1 1		5	\$6	do

Date.	Name.	Age.	Occupation.	Residence. (Town.)	Married.	Single.	Widow.	Children.	Dependents.	Cause of Accident.
1909 Nov. 13 13 13 13 13	Robeza, Joseph Sopko, Cantina. Speir, James. Stettler, Harry Sandeen, Olaf	24 34 24 50	Driver Miner do do	Cherry . do . do	 1 1 1	1 1 		6 2 4	7 3 4	Mine firedododododododo
13 13 13	Seitz. Paul	30 39	dodo	Cherry	1 1 1		1 1	2 3 2 5	4 3 5	do
13	Sarginto, August Siamon, Andrew Semboa (or Sereba), J Smith, John W Sublich, Charles	24	do		1		1 ! 1		4	do
13	Suhe, John Suhe, Mike Suffen, John Sukitus, Joseph Steele, Peter	17	do	do		1	····i	2 2 3	3 3 4	do
13	Sarbelle, Julius Stearns, James Seitz, Edward Scotland, William Shemia, Jno	28	do	Cherry	1 1 1 1		1 1 1 1		2 5 4	do do do do
13	Stewart, Harry. Szabrinski, Jno. (known as Joh Smith). Stam, Antone. Staszeski, Tony. Sestak, Jno.	29 44	Cager Timberman	do Spring Valley		i i	1 1	4 1	2 2	do
19	Tinko, Joseph, Jr Tinko, Joseph, Sr Tinko, Steve Tinko, Andrew. Teszone, George	00	a.	a.	١.		1		6 4	. do
13 13 13 13 13	Talioli, Eugene Tonnelli, Emilia Turchi, Nocenti Tosseth, Frank. Tamashanski, Joseph	38 30 31 29 28	Minerdo	dododododoOld country	1		1	····i	₂	. do
13 13 13	Tamarri, Pasquale Tonner, John Ugo, Filippe White, Geo Welkas, Anthony	28 54 31	Minerdo	dodododo	1 1		1 1 1 1	1 2	3 1 2 3	do
13 13 13 13 13	Waite, Chas	42 35 47 32	Mine examiner. Timberman hp. Minerdodo	. do	1 1 1 1		1 1 1 1	1 5 2 4	3 5	. do

Date.	Name.	Age.	Occupation.	Residence. (Town.)	Married.	Single.	Widow.	Children.	Dependents.	Cause of Accident.
1909 Nov. 13 13 13 13 13 13	Yagoginiski, Frank. Yearley, Joseph Zliegley, Thos Zekuia, Joseph Zacherria, Giatano Zeikell, Pat	33 40 28	dodododo	Cherry do	1 1 1	::	1 1 1	7 3 3	8 4 4	Mine fire

Age Periods and Nativity of Employés Who Lost Their Lives in the Cherry Mine Disaster Nov. 13, 1909.

Age Periods.	Number.	Nationality.	Number.
15 to 20 years 21 to 25 years 21 to 25 years 26 to 30 years 31 to 35 years 31 to 35 years 41 to 45 years 41 to 45 years 45 to 50 years 51 to 55 years 62 years Not reported.	16 12	American Austrian Belgian English French German Greek Irish Italian Lithuanian Polish Russian Scotch Slavish Swede Welsh Not reported	3 29 7 5 11 14 3 3 1 65 18 8 3 20 35 9 2
Total	256	Total	256

[†] Supporting three sisters. ‡ Mother and six children. § Supporting mother and five children. NOTE—Twenty not reported whether married or single.

Recapitulation of Fatal Accidents—Second District—1910.

							_
Residence,	No.	Occupation.	No.	Cause of Accident.	No.	Colliery.	No.
Farmington Middle Grove Norris St. David. Sherrard. Victoria	1	Foreman, night Laborer Miners Shot-firers	2	Cage falling Exploding keg of pow der. Exploding loose pow- der Explosion, shot Falling coal. Falling roof. Fell astride rail, on	2	Alden Co. Big Creek Co. Coal Valley Co. Maplewood Co. Myers & King. National Co. Norris Co.	4 1 1 1 1 1 1 1 1
Total	10		10		10		10
				CHERRY MINE DISASTER.		•	
Austria. Cardiff Cedar Point, Ia. Cherry Cleveland, O Italy Oglesby Old Country. Bussia Scotland Scotland Seatonville Spring valley Streator Sweden Wales Not given	1 179 1 9		2 12 1 1 2 211 2 16 5 4		256	St. Paul Co.	256
TotalGrand total	256		256 266		256		256 266
	1						

Non-Fatal Casualties—Second District—July 1, 1910.

Date.	Name.	Age.	Residence. (Town.)	Married.	Single.	Children.	Dependents.	Character of Injury and Cause of Accident.	Time lost—days.
3 7 7 7 12 13 13 23 29 31 Aug. 2		18 46 33 18 50 42 41 36 20	Ladd Spring Valley do Seatonville Norris Spring Valley Dalzell Spring Valley	1 1 1 1 1	1 1 1 1	2 1 7 1 4	8 2 5	Hand injured, falling roof. Leg broken, caught by pit car. Leg injured, falling coal Foot injured, falling coal Foot minuted, falling coal Foot minuted, falling coal Leg broken, falling roof. Leg injured, falling roof. Leg injured, falling roof. Leg broken, fell from smoke stack. Leg broken, fell from smoke stack. Leg bruised, falling roof. Back broken on cage, engineer lost control of engine, injury	38 60 30 39 217 30 40 30 40
14 16	Robert Nichol	23 31	Canton Cherry	ì		i	4 1 2	permanent. Leg injured, falling coal. Legs bruised, caught between pit cars. Leg broken. caught by pit car. Arm injured, fell on loose plank on surface Back injured, falling roof.	62 32 100 50

Name. 1 J. P. Barrowmat 4 John Haddow 8 Fred Waterwort 10 William Ninvick 10 Boris Glazawski, 17 Dominick Busso 20 Hugh Gray 2 Sam Byrner, 7 John Spinson 7 John Gresalano 4 Joe Laskofski, 14 Joe Laskofski, 21 Joe. Cinnatts 23 Jacob Douglas	46	Sherrard	1 1 1		10 10	11	Character of Injury and Cause of Accident. Foot bruised, falling coal Shoulder bruised, falling roof	Time lost - days
9 William Ninvick	46	Sherrard	1			11	Shoulder bruised, falling roof Body bruised caught under pit	
9 William Ninvick	46	Sherrard	1			11	Shoulder bruised, falling roof Body bruised caught under pit	
10 Boris Glazawski, 17 Dominick Busso 20 Hugh Garnsey. 2 Sam Bryner. 7 Chas. Johnson. 7 John Gresalano. 14 Ben. Walwin. 14 Joe Laskofski. 21 Joe. Cinnatts. 22 Jacob Dauglas	30 28 49 30 37	Spring Valley Seatonville Farmington Roseville.	i			1	Back injured (severely) falling	1
20 Hugh Garnsey 2 Sam Bryner 7 Chas, Johnson 7 John Gresalano 14 Ben, Walwin 14 Joe Laskofski 21 Joe Cinnatts, 22 Lasab Dougles	45 45 30 37	Farmington Roseville	1	1			Back injured (severely) falling coal. Foot crushed, falling of roof	Î
2 Sam Bryner. 7 Chas. Johnson. 7 John Gresalano. 14 Ben. Walwin. 14 Joe Laskofski. 22 Joeob Dougles	35	Rosevine	٠.	1			Leg injured, caught under cage.	
7 John Gresalano 14 Ben. Walwin 14 Joe Laskofski 21 Joe. Cinnatts	37	Ladd	1		3	3	Arm broken, struck by mule	
14 Joe Laskofski 21 Joe Cinnatts		Spring Valley	1		2	3	Hand crushed, falling roof	
21 Joe. Cinnatts	47	do	1			1	Head cut, falling roof	
	55	Kewanee	i	1	4	5	Ankle severely bruised, falling	
27 Frank Smardaal	16	Spring Valley		1			roof	
28 Dom. Palmerie	48	Ladd	1		3	4	Head cut, falling roof	
12 Anton Capello	1-i 39	Spring Valley	1		5	6	Collar bone broken, falling coal.	
17 John Savoi	55	do	î		9	10	Toe broken, falling roof	
20 Fred. Capatanni 22 P. Marselus	36	Marquette	::	1			Ribs (2) broken, caught by pit	
						2	Head, body and face burned.	
23 Bert. Dawson	26	Canton	1		2	3	Shoulders injured, coal flying	
23 George Varner	35	do	1				Arm broken, coal flying from	
27 John Gelaski	2	Spring Valley	1		2	3	Body bruised, falling roof	
29 Peter Comstock.	4	Dalzell		i			Foot bruised, falling coal	
							lost control of engine	
29 J. Mallani	31	do		1			Hip injured on cage, engineer	
29 A. Susin	52	do		1			do	
29 N. Caviola 30 Alex. Buffer	38	Spring Valley	::	1	::::		Arın broken, fell down on the	
1 J. Wosillus	28	do		1			Toe cut off, under pit car	
3 V. Chisu 3 George Macario	40	Marquette	1	· ;	1	2	Body injured, falling roof Knee cut, hatchet slipped	
15 Pat. Trainor	49	Mayton	1		3	4	Breast injured, falling roof	
20 Frank Yucca	29	do	11	1		::::	Foot bruised, caught by pit cars	
20 Cleto Ballerene 21 Emil Bengston	48	Ladd Sherrard	1		3	1 4	Leg broken, falling roof Fingers crushed, caught by pit	
					5	6	Finger cut off, falling roof	
6 Frank Cione	96	do		1			Hand injured kicked by mule	
12 Chabrozie Kazio	lski 20	Seatonville	::	1			Hand injured, falling roof	
24 Andy. Perossi 26 L. Rasbidowski	50	Spring Valley		1			Foot injured, falling coal Foot injured, caught by nit car	
26 John Peyla	19	do		1		;	do	
28 James Costa 29 Matt. Beveridge.	25	Sherrard	1	i		1	Leg broken, falling root Leg injured, caught by pit car.	
2 Gomer Williams	+1111 96	do	1		3	-1	Knee injured, caught by pit car	
9 Louis Dewara	50	Spring Valley	1	i			Head injured, falling roof	
22 (11) 11) 11) 12) 12) 12) 12) 12) 12) 12)	7 Frank Smardock 7 Frank Smardock 8 Dom. Palmerie. 6 John Whitworth 8 Chas. Romanows 7 John Savoi. 9 Fred. Capatanni. 2 P. Marselus. 3 George Varner. 7 John Gelaski. 8 John E. Parnell. 9 Peter Comstock. 9 U. Depouch. 9 J. Mallani. 9 A. Susin. 9 D. Cambussi. 9 N. Caviola. 10 Alex. Buffer. 11 J. Wosillus. 13 V. Chisu. 13 Corge Macario. 14 Depouch. 15 Pat. Trainor. 16 Jene Corge Macario. 17 J. Wosillus. 18 George Macario. 19 J. Calleron. 19 J. Calleron. 10 Cleto Balleron. 10 Cleto Balleron. 11 Emil Bengston. 12 Fred Lucas. 15 John Weillus. 15 Cred Lucas. 16 John Weillus. 16 Cleto Balleron. 17 Emil Bengston. 18 Jene Cred Lucas.	7 Frank Smardock. 4 8 Dom. Palmerle. 4 8 John Mitworth. 22 2 Anton Capello. 5 8 Chas. Romanowski. 3 8 Tohn Savoi 5 8 Chas. Romanowski. 3 7 John Savoi 5 9 Fred. Capatanni. 3 8 Jer. Dawson. 2 2 Andrew Bugas. 3 1 Bert. Dawson. 2 2 George Varner. 3 8 George Varner. 3 7 John Gelaski. 2 8 John E. Parnell. 3 7 John Gelaski. 2 8 John E. Parnell. 3 9 Peter Constock. 4 9 U. Depouch. 3 9 L. Savoida. 3 9 A. Susin. 5 9 D. Cambussi. 4 1 9 N. Caviola. 3 8 Alex. Buffer. 1 1 J. Wosillus. 2 1 J. Wosillus. 2 1 J. Wosillus. 2 1 J. Wosillus. 2 2 J. Chieu. 4 8 George Macario. 2 8 George Macario. 2 8 J. Chieu. 4 8 George Macario. 4 8 George	7 Frank Smardock. 40 Spring Valley. 8 Dom. Palmerie. 45 Ladd. 6 John Whitworth. 22 Cuba. 2 Anton Capello. 52 Spring Valley. 8 Chas. Romanowski. 38do. 9 Fred. Capatanni. 33 Ladd. 10 Fred. Capatanni. 33 Ladd. 12 F. Marselus. 20 Marquette. 2 Andrew Bugas. 31 Norris. 3 Bert. Dawson. 20 Canton. 3 George Varner. 35do. 7 John Gelaski. 22 Spring Valley. 1 John F. Parnell. 37 Sherrard. 9 Peter Constock. 44 Dalzell. 9 U. Depouch. 28 Marquette. 9 J. Mallani. 31 .do. 9 A. Susin. 52 .do. 9 J. Asulin. 31 .do. 9 N. Caviola. 38 .do. 9 N. Caviola. 38 .do. 9 N. Caviola. 38 .do. 1 J Wosillus. 28 .do. 3 Werty L. Caviola. 38 .do. 3 Werty L. Caviola. 39 .do. 3 Werty L. Caviola. 39 .do. 3 Werty L. Caviola. 39 .do. 3 Werty L. Caviola. 38 .do. 3 Werty L. Caviola. 49 .do. 3 Werty L. Caviola. 40 .do. 4 Werty L. Caviola. 40 .do. 5 Werty L. Caviola. 40 .do. 5 Werty L. Caviola. 40 .do. 6 Werty L. Caviola. 40 .do. 6 Werty L. Caviola. 40 .do. 6 Werty L. Caviola. 40 .do. 7 L. Caviola. 41 .do. 8 Werty L. Caviola. 41 .do. 8 Werty L. Caviola. 41 .do. 8 Werty L. Caviola. 42 .do. 9 Werty L. Caviola. 43 .do. 9 Werty L. Caviola. 44 .do. 9 Werty L. Caviola. 45 .do. 9 Werty L. Caviola. 40 .do. 10 Cetto Balleren. 41 .do. 11 .do.	7 Frank Smardock	7 Frank Smardock. 40 Spring Valley 1 8 Dom. Palmerie. 45 Ladd. 1 16 John Whitworth 22 Cuba. 1 2 Anton Capello. 52 Spring Valley 1 8 Chas. Komanowski. 38 .do. 1 1 Jer Marselus. 20 Marquette. 1 2 P. Marselus. 20 Marquette. 1 2 P. Marselus. 31 Norris. 1 3 Bert. Dawson 22 Canton 1 3 George Varner 35 .do. 1 3 George Varner 35 .do. 1 7 John Gelaski. 25 Spring Valley 1 7 John Gelaski. 25 Spring Valley 1 8 John E. Parnell. 37 Sherrard. 1 9 Lepouch. 32 Marquette. 1 9 J. Maflani. 31 .do. 1 9 J. Asusin. 52 .do. 1 9 J. Marguette. 1 9 J. Marguette. 1 9 J. Asusin. 52 .do. 1 9 J. Carbussi. 41 .do. 1 9 N. Caviola. 38 .do. 1 1 J. Wosillus. 28 .do. 1 1 J. Wosillus. 28 .do. 1 3 Warquette. 1 9 J. Wosillus. 28 .do. 1 3 Warquette. 1 9 J. Wosillus. 28 .do. 1 3 Warquette. 1 5 Gorge Macario. 26 Spring Valley. 1 3 George Macario. 26 Spring Valley. 1 3 George Macario. 27 Spring Valley. 1 4 Marquette. 1 5 Hart Trainor. 1 6 Warquette. 1 7 Alberto Lenzotti. 21 Seatonville. 1 8 Lenil Bengston. 48 Sherrard. 1 9 Lenil Bengston. 48 Sherrard. 1 1 Emil Bengston. 48 Sherrard. 1 2 Fred Lucas. 34 Spring Valley. 1 1 Google Spring Valley. 1 1 Google Spring Valley. 1 1 Emil Bengston. 48 Sherrard. 1 2 Fred Lucas. 34 Spring Valley. 1	7 Frank Smardock	7 Frank Smardock 40 Spring Valley 1 3 4 6 John Mhitworth 23 Cuba 1 1 3 4 6 John Whitworth 23 Cuba 1 1 5 6 6 3 Chas. Romanowski 38 do 1 2 3 7 John Savoi 55 do 1 9 10 9 Fred Capatanni 35 Laddut 1 1 2 3 3 Laddut 1 1 9 10 9 Fred Capatanni 35 Laddut 1 1 1 2 2 3 3 Bert. Dawson 26 Canton 1 2 3 3 George Varner 35 do 1 2 2 3 3 George Varner 35 do 1 2 2 3 3 John E. Parnell 37 Spring Valley 1 2 3 3 John E. Parnell 37 Spring Valley 1 2 3 3 John E. Parnell 37 Spring Valley 1 2 3 5 Peter Common 1 1 2 2 3 5 John E. Parnell 37 Spring Valley 1 2 3 5 Peter Common 1 1 2 2 3 5 Peter Common 1 1 1 2 2 5 Peter Common 1 1 1 1 2 2 5 Peter Common 1 1 1 1 2 2 5 Peter Common 1 1 1 1 2 2 5 Peter Common 1 1 1 1 1 2 2 5 Peter Common 1 1 1 1 1 2 2 5 Peter Common 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	7 Frank Smardock

Non-Fatal Casualties—Second District—Concluded.

Date.	Name.	Age.	Residence. (Town.)	Married.	Single.	Children.	Dependents.	Character of Injury and Cause of Accident.	Time lost—days.
12 14 14 14 15 15 12 22 22 22 29 30 30 30 30	John Plussness	18 37 31 30 23 38 30 66 30 32 25 28 35 44 19 18 32 32 33 38 33 38 34 52 43 44 43 43 44 43 44 44 44 44 44 44 44	Spring Valley Date Valley Ado Seatonville Spring Valley Ado Seatonville Spring Valley Ado Seatonville Spring Valley Ado Seatonville Seatonville Spring Valley Middle Grove Sherrard Spring Valley Middle Grove Spring Valley Spring Valley Spring Valley Spring Valley Spring Valley Spring Valley Ado Astoria	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	1 i i i i i i i i i i i i i i i i i i i	2 2 1 3 6	3 3 1 4 4 7 7	Finger broken, falling roof. Arms burned, exploded loose powder. Leg broken, falling coal. Foot injured, pit car. Foot injured, falling roof. Arm broken, pit car. Foot injured, falling coal. Foot injured, falling coal. Foot injured, falling coal. Finger crushed, falling coal. Finger crushed, falling coal. Finger crushed, falling coal. Finger cut, falling coal. Leg injured, pit cars. Head cut, falling roof. Leg injured, caught in switch from broken, coal flying from a blast.	† † † † † † † † † † † † † † † † † † †
	10001			99	21	.107	210		

* Injured Aug. 6, 1909. Died from injuries July 11, 1910.
† Not known to have recovered July 1, 1910.

NOTE—Of the great number of men injured during the month of March, it is not likely that more than one third of them would loose 30 days, as a result of the injuries, but the mines suspended operation April 1st, and the coal companies could not give the period of disability; they reported them as non-fatal accidents, and I have done the same.

Total number of men injured. Not recovered July 1, 1910.	106 37
Number recovered July 1, 1910.	69
Total time lost by men recovered, days	4,330

Recapitulation of Non-Fatal Accidents—Second District—1910.

Residence.	No.	Occupation.	No.	Cause of Accident.	No.	Colliery.	No.
Astoria Brereton Cable Canton Cherry Duba Dalzell Farmington Kewanee Ladd Marquette Mavton Middle Grove Norris N. Henderson Rossville Seatonville Sherrard. Spring Valley	1 1 3 1 2 7 3 1 6 8 1 1 1 2 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	Cagers	17 1 12 64 2 1 3	Caught in switch frog Caught under cage Coal falling down sh. Coal flight glown sh. Coal flight grom blast Cut by rail. Engineer lost control of engine Exploding loose powder. Exploding loose powder. Explosion in the mine (shotfirers expl). Falling coal. Falling roof. Fell down shaft Fell from snoke-stack (outside). Fell on loose plank (outside). Fell on rail. Hatchet slipped. Kicked by a mule.	1 1 3 1 7 1 2 21 37 1 1 1 1	Alden Coal Co. Astoria Woodland Coal Co. Bayners' Mine (Local Coal Yalley Mining Co. Bryners' Mine (Local Coal Yalley Mining Co. III. 3d Vein Coal Co. Kewanee Coopera, C. Co. Maplewood Coal Co. Marq. 3d Vein C. Co. Milans' Mine (Local). Monmouth Coal Co. National Mining Co. Newsam Bros. St. Paul Coal Co. Spoon River Coal Co. Spoon River Coal Co. Spring Valley Coal Co. Star Coal Co. Star Coal Co. Star Coal Co.	1 1 8 7 1 1 1 1 1 1 1 1 1 1 1 1 1 64
Total	106		106		106		106

Recapitulation of Non-Fatal Casualties, Nature of Injuries, Conjugal Relations and Time Los'—Second District—1910.

Nature of Injuries.	er.			نہ	ents.	Time l	Percent	
Nature of Injuries.	Number.	Married	Single.	Children	Dependents.	Total days.	Average days.	of injuries.
nikles broken, nikles injured, nrms and face burned nrms broken nrms injured aack broken aacks injured, sodies injured, sodies injured, sodies injured, sollar bone broken, injured and injured, lollar bone broken, injured and injured lead, arms and body burned, lead, arms and body burned, leads injured lips injured, lips injured, lips injured, least sinjured least sinjured least injured, least broken, legs injured lose broken, legs injured, lose broken, legs injured, lose broken, loses injured, et off	1 3 2 7 1 1 3 3 7 1 1 20 3 3 4 4 4 2 5 5 3 4 9 17 7 3 2 2 2 1	6 1 1 3 3 3 1 1 1 6 2 2 2 1 1 3 1 1 1 1 6 1 1 1 1 1 1 1 1 1 1 1 1	1 1 2 1 1 2 1 1 2 2 1 2 2 2 3 3 3 4 2 2	111 19 1 4 7 3 3 5 20 5 5 8 8 2 1 1 3 5 2 8 2 1 1 2 8 2 8 2 8 1 8 1 8 1 8 1 8 1	13 25 25 5 10 6 4 6 6 26 26 7 10 4 2 11 2 4 4 11 4 11 12 4 11 11 11 11 11 11 11 11 11 11 11 11 1	100 30 264 50 180 427 40 65 59 13 170 60 249 91 91 1180 180 180 488 477 130 34 66 66 66 66 66 67 68 68 68 68 68 68 68 68 68 68 68 68 68	50.00 30.00 66.00 50.00 180.00 71.17 40.00 76.08 56.66 60.00 90.00 100.00 30.00 69.71 43.36 65.00 34.00 34.00 36.00	.9.2 2.84 1.88 6.6666.0 9.9.2 19.9.3 18.87 2.88 3.77 4.77 1.88 1.87 2.8.8 3.77 4.77 1.88 1.87 1.88 1.87 1.88 1.87 1.88 1.87 1.88 1.87 1.88 1.87 1.88 1.87 1.88 1.87 1.88 1.87 1.88 1.87 1.88 1.87 1.88 1.88
Total	106	59	47	157	216	4.330	62.75	100.0

Bureau County-

			Ou	tput of M	lines in	Γons.	al product.
Number.	Name of Operator.	Postoffice address of the mines.	Mine run.	Lump.	Other grades.	Total.	Aggregate value of total product.
	SHIPPING MINES.						
3	Spring Valley Coal Co., No. 3 Spring Valley Coal Co., No. 5 Spring Valley Coal Co., No. 1 Ill. 3d Vein Coal Co., No. 1 Spring Valley Coal Co., No. 1 St. Paul Coal Co., No. 4 Marquette 3d Vein C. M. Co., No. 1.	Dalzell Spring Valley	109 1,724 24,331 23,251 4,273	173,539 148,564 141,943 150,285 117,721	37,079 37,259 30,441 27,498 25,148 45,323	237,821 212,522 203,336 192,692 179,706 163,044	207, 908 279, 923 194, 378
,	Total				36, 594 239, 342	137,309	193, 591 \$1, 914, 637
	LOCAL MINES.						
2 3 4 5	L. F. Brandt. Donahue & Jones Jas. Neave. Rockyrun C. Co., Masters Bros. P. C. Nelson John Griffith C. W. Riley	Sheffield Tiskilwa Sheffield	6, 400	6,656 2,500 1,720		7,200 6,656 6,400 2,800 1,720 720 628 440	11,648 11,200 5,500 3,440 900 1,256
	Total					26, 564	
	1 0tai—15 mines		70,336	1,042,976	239,682	1,352,994	\$1,968,181

Mines reported for 1909, 16. Abandoned mines, 1. Mines in 1910, 15.

Second District-1910.

Disposit Outp	ion of ut	r blasting	n.	E	mployé	ės.		Accid	lents.	solld or	Ani	nber of mals der-	
Tons loaded on cars for shipment.	Other purposes.	Kegs of powder used for blasting coal.	Days of active operation.	Average number of miners	All other employes.	Total.	Tons mined by hand.	Killed.	Injured.	Blasting coal—From s undercut or both.		Mules.	Number.
229,407 205,004 172,211 151,996 167,888 159,985 113,910 1,200,401	8,414 7,518 31,125 40,696 11,818 3,059 23,399	5,605	192 167 165 198 181 106 175	439 454 516 380 354 435 275 2,853	154 168 173 176 168 123 110 1,072	593 622 687 556 522 558 385 3,925	237,821 212,522 203,336 192,692 179,706 163,044 137,309	256	28 13 12 7 7 11 1 9	do do do do			1 2 3 4 5 6 7
	7,200 6,650 6,400 2,800 1,720 720 628 440 26,564	175 105 250 50 50	300 280 200 275 200 150 120 90	10 20 8 6 10 4 4 7 69	1 2 1 1 1 6	11 22 9 7 10 4 4 8 	7,200 6,656 6,400 2,800 1,720 720 628 440 26,564						1 2 3 4 5 6 7 8
1,200,401	152,593	6,209	187	2,922	1,078	4,000	1,352,994	256	81				

Fulton County-

_			Ot	atput of	Mines in Te	ons.	product.
Number.	Name of Operator.	Postoffice address of the mines.	Mine run.	Lump.	Other grades.	Total,	Aggregate value of total product
	SHIPPING MINES.	Possestore		70.000	107 000	910 740	0050 000
11 22 33 44 56 67 77 88 9 10 11 12 13 14 15 15 12 20 20 22	Monmouth Coal Co., No. 1 Maplewood Col. Co., No. 2 Canton Coal Co., Big Creek Coal Co., No. 2 Simmons Coal Co., Simmons Maplewood Coal Co., No. 1 Big Creek Coal Co., No. 1 Big Creek Coal Co., No. 1 Big Creek Coal Co., No. 4 Norris C. M. Co., Norris Star Coal Co., No. 2 Alden Coal Co., No. 2 Alden Coal Co., No. 5. Eagle Mining Co., No. 1 Alden Coal Co., No. 6. National Coal Mining Co. National Coal Mining Co., No. 3 Kewsan Hood Spoon Rives Coal Co., No. 3 Spoon Rives Coal Co., Astoria Woodland Coal Co. Coal Creek Mining Co. Star Coal Co., No. 3 J. R. Riley Total	Brereton Farmington Canton St. David St. David Canton St. David Canton Canton Former Caba do do Canton Fiatt Norris Middle Grove Cuba Middle Grove Cuba Figure Farmington Elisville Elisville Breeds Breeds Breeds	5,414 3,836 6,288 28,911 6,751 10,428 4,873 1,689 2,334 1,937 32,578 7,130 3,664 3,528 2,849 4,455 10,227 3,013 6,000	79, 903 65, 554 45, 762 36, 168 41, 386 60, 135 37, 155 50, 000 38, 418 61, 841 27, 726 30, 936 42, 058 15, 634 42, 058 11, 606 11, 473 10, 606 11, 380 5, 245 5, 257 1, 400	125, 232 117, 571 112, 055 79, 491 93, 398 65, 400 74, 339 62, 218 70, 272 25, 421 252, 840 18, 785 20, 838 30, 651 21, 538 22, 049 6, 225 4, 610 4, 610 1,	210, 549 186, 961 164, 105 144, 570 134, 784 132, 343 117, 091 110, 379 89, 596 82, 553 82, 299 62, 896 53, 415 45, 859 44, 801 23, 572 18, 539 13, 182 3, 182 3, 185 8, 000 1, 867, 017	\$252,660 197,946 164,929 168,480 165,433 141,578 144,547 109,000 88,332 96,465 63,000 83,862 57,782 49,947 21,865 11,308 9,000 9,000 9,000 9,000 9,000 9,000 9,000 9,000 9,000 9,000 9,000 9,000 9,000 9,000 9,000 9,000
11 2 3 4 4 5 6 10 11 11 11 11 11 11 11 11 11 11 11 11	LOCAL MINES. S. E. Lee Geo Westerly Neil Baxter J. Sutton. H. Vonach J. Seivers J. McLaughlin Riverview Coal Co. M. Bushneil W. Bath. R. G. Ellsworth Bader & Bader Jas Yooum J. However Bader J. F. Starter J. F. Starter J. F. Service Maloon & Gofineh F. Tompkins Anderson & Savill Joe Williams E. R. Knickerbocker Bennett Bros John Kinnamon A. Wages S. Taylor & Bro W. A. Johnson Frank Hubbell Robinson & Stevens Henry Vice	I pava. Farmington Canton .do	109 800 2, 600 4600 5, 000 90 2, 500 11, 460 800 200 320 200	14, S32 9,000 5,000 6,000 -3,000 2,551 1,865 1,865 1,400 -1,591 1,200 1,200 1,200 1,200 1,200 1,100 1,100 900 900	400 378 400 360	15, 431 13, 800 7, 600 6, 806 5, 600 15, 600 15, 600 12, 929 2, 488 2, 432 1, 875 1, 800 1, 640 1, 500 1, 400 1, 200 1, 2	9,775 9,000 5,000 4,764 4,875 3,985 5,715 3,750 3,400 1,875 1,180 1,1870 1,1870 1,140 1,140 1,140 1,140 1,140 1,140 1,140 1,140

Second District-1910.

Disposi Outp	tion of out.	r blasting	ď	E	mploye	is.		Accid	lents.	solid or	Anii	nber of mals der-	
Tons loaded on cars for shipment.	0 3	Other purposes. Kegs of pawder used for road. Days of active operation.		Average number of miners All other employe's. Total.		Tons mined by hand.	Killed.	Injured.	Blasting coal—From underent or both.	Mules.		Number.	
201,586 183,988 163,755 138,059 132,584 128,622 117,193 95,973 106,190 87,796 43,199 41,070 20,598 18,256 12,567 10,280 8,967 7,600	2,709 2,690 3,731 2,674 283 615	12, 332 1,010 8,502 3,366 6,854 4,190 6,450 4,759 3,934 5,360 4,245 3,500 2,137 1,903 2,432 1,394 927 342 634 401	196 144 215 154 210 147 133 172 191 196 178 192 220 186 181 150 165 153 199 202 68 200	300 310 155 16 116 175 98 154 120 92 120 84 56 85 51 125 33 35 18 21 33 9	31 36 31 58 50 22 19 10 4 20 3	411 398 226 314 169 236 210 210 1156 115 92 116 73 175 61 54 28 25 53	210,549 186,961 164,105 164,172 134,754 132,346 66,167 117,091 89,556 82,553 82,299 62,896 48,765 30,573 44,801 23,572 13,182 10,280 9,207 8,500			Soliddo			1 1 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2
1,768,844	98,173 15,431 13,800 7,600 6,800 5,000 3,990 2,452 2,452 1,875 1,800 1,640	93,051 65 500 300 275 40 170 122 100 75 360 148 150	310 265 200 290 300 280 200 200 216 340 310 275 100	2,176 3 9 7 7 5 4 4 4 4 5 8 3	1,328 3 2 1 2 1 1 1 3 2 1 1 1 1	3,504 3 12 9 8 8 7 7 4 7 7 7 7 3 3 4 4 4 6 6 111 3 6 6	15,431 13,800 7,600 6,860 6,000 5,000 2,929 2,250 2,468 2,432 1,875 1,800 1,640	8	14				1:
	1,600 1,600 1,591 1,591 1,425 1,400 1,250 1,200 1,200 1,100 1,100 1,000 960	220 25 60 35 85 14 40 72 28 52 32 50 40	240 81 275 150 125 100 200 200 150 300 168 220 100 100 150	# 5 8 3 5 ± 3 2 4 6 3 3 2 3 3 3 4 3 3 4 3 3	1 2	132 250 233 335 534 43	1,425 1,400 1,250 1,200 1,200 1,200						11 11 11 11 12 22 22 22 22 22 22 22 22 2

Fulton County-

			O	utput of	Mines in Te	ons.	l product.
Number.	Name of Operator.	Postoffice address of the mines.	Mine run.	Lump.	Other grades.	Total.	Aggregate value of total product.
_	LOCAL MINES—Continued.						
$\begin{array}{c} 312\\ 323\\ 345\\ 367\\ 389\\ 401\\ 424\\ 446\\ 447\\ 449\\ 551\\ 555\\ 556\\ 666\\ 666\\ 666\\ 666\\ 666$	Delong Bros W. A. Phillips G. Mimmens Satar'l Parr A. A. Eyman D. Caplinger J. Finifrock Wm. Ackerson E. Clarkson W. McBride J. Stufflebaum J. J. Stufflebaum J. Stufflebau	Rapatee Cuba Astoria Marietta Canton Table Grove Fairview Peoria Canton Cuba Canton Cuba Go Cuba Cuba Cuba Cuba Cuba Cuba Cuba Cuba	770 160 300 525 402 200 372 300	300 300 280 60 250 240 240 240 240 240 200	75	800 800 800 800 700 720 716 600 600 600 600 600 400 400 400 320 300 300 300 280 240 240 240 240 240 240 240 240 240 24	1, 200 1, 200 1, 200 1, 200 1, 200 1, 200 1, 200 1, 200 1, 207 1,
70 71 72 73 74 75 76 77 78 79 81 82 83	J. R. Collins R. World M. J. Stout Ray Bussie H. Crunan J. D. Cluts L. M. Turner	do. Astoria Ipava. Cuba. Fairview		160 120 120 120 110 105 100 80 80 80 80 80		163 160 160 120 120 110 110 105 100 80 80 80	245 200 200 200 180 180 220 185 125 120 120 100

Second District—Continued.

Disposit: Outp	ion of ut.	for blasting	ion.		nployė	S.		Accio	lents.	solid or	Anii	nber of mals der- ind.
Tons loaded on cars for shipment.	Other purposes.	Kegs of powder used for blasting coal.	Days of active operation	Average number of miners.	All other employés.	Total.	Tons mined by hand.	Killed.	Injured.	Blasting coal-From undereut or both,	Horses.	Mules.
	200		40.0									
	800 800	40 40	175 150	2	1	3233233533412312121243121122112333122322222112211	800 800					
	800 800		150 150	3		3	800 800					
	770	70	150	2		2	770					
	720	24	310 250	3 2 3 5 2		3	720					
	716 700 600	100	120	5		5	700					
	600 600	18 30	150 100	2		2	600 600				• • • • • •	
	600		200	1		I	600					
	560 525	20 9	100 40	2 3		2	560 525					
	500	30	120	1		1	500					
	480 402	50	280 100	2 1 2 3 3 1		2	480					
	400	40	175 90	2	·····i	2	402 400					
	400 400	40	90 300	3	1	4	400 400					
	372		100	1		1						
	350	25 10	156 100	2		2	350 320					
	320 300	20	175	2		2	300					
	300 300	20	150 150	2 2 2 1 1 2 2 2 1 1 2 2 2 1 1 1 2 2 1 1 1 2 2 1 1 1 2 2 1 1 1 2 1		1	300 300					
	300		70	[2		2	300					
	280 275	47 20	150 140	3		3	280 275					
	272 250	24	300	2		2	272					
	250	15	50	2		2	250 240					
	240 240	25 30	150 100	3	i	3	240					
	240	12 25	100	1	1	2	240 240					
	240 216	30	100 75	2		2	240 216					
	200		90	1		1	200					
	200 200	12	90 125	1 2		2	200 200					
	200	20	130	2		2	200					
	200 163 160	6	60 100	1		1	163 160					
	160	10	40	2		2	160					
	120 120	20 10	125 60	2		2	120 120					
	120	10	50	1		ī	120					
	110 105	12	95 100	1		1	110 105					
	100	5	30	2		2	100					
	80	. 5 5	50	1		1						
	80 80	10	50 50	1 1 1 2		1 1 1 2	80 80					
	80	0	50	î		î	80					

Fulton County-

_			_				
			On	ons.	otal product.		
Number.	Name of Operator.	Postoffice address of the mines.	Mine run.	Lump.	Other grades.	Total.	Aggregate value of total product
85 86 87 88	LOCAL MINES—Concluded. E. E. Post. W. B. Morgart. G. B. Whitehead C. A. Hall. E. R. Lauery. Louis Putman Total Total—III mines.	Canton Sheldon Grove Canton	21, 133	80 80 80 80 64 40 84,684 795,582	1,016,448	80 80 80 80 64 40 112,121 1,979,138	100 120 100 80 76 50 \$168,004 \$2,380,327

Mines reported for 1909, 74. New mines, 38. Abandoned mines, 1. Mines in 1910, 111.

Second District—Concluded.

Disposit Out _I	tion of out.	or blasting	ii.	Е	mploy	ės.		Accie	lents.	solid or	Number of Animals Under- ground,		
Tons loaded on cars for shipment.	Other purposes.	Kegs of powder used for blasting coal.	Days of active operation.	Average number of miners.	All other employes.	Total.	Tons mined by hand.	Killed.	Injured.	Blasting coal—From undercut or both.	Horses.	Mules.	Number.
1,768,844	80 80 80 80 64 40 112,121 210,294	10 6 4 8 30 4,465 97,516	148	2 1 2 1 2 2 2 2 2 2 38 2,414	1.355	2 1 2 1 2 2 2 2 3,769	80 80 80 80 64 40 112,121 1,775,008	8	14				84 85 86 87 88 89

Henry County-

_			Ou	tput of 1	Mines in '	Fons.	product.
Number.	Name of Operator.	Postoffice address of the mines.	Mine run.	Lump.	Other grades.	Total.	Aggregate value of total product.
	SHIPPING MINES.						
1 2 3	Kewanee Coal & Mining Co., No. 2 Atlas Coal Co., No. 4 Donahoo Coal Co.,	Kewanee Galva Moline	35,836 3,000	17,597 8,355 2,400	9,982 800 600	63,415 9,155 6,000	\$ 86,694 16,000 10,350
	Total		38,836	28.352	11,382	78,570	\$113,044
	LOCAL MINES.						
2 3 4 5 6 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21	Fred Henry Bates Bros. Kewanee Cooperative Coal Co. Peoples Fuel Co. Fairlie Bros. Matt Atkinson. North Main Coal Co. R. Todd & Sons E. S. Barlow. Emil Ahlgren Jeff Glenn. George Hartman. Leo Maleon. James Kemerling Ernest Gray John Kineade. Joe Carter. Robert Kay R. E. Meloen. L. Williams. H. C. Finch. John Summerson	.do .	2,803 750 3,068 93	6,990 6,399 1,762 3,200 3,119 584 3,600 2,527 1,932 2,388 1,400 1,080 840 600 3000 248 240 160 125 60	437 818 320 120	7, 300 7, 290 6, 949 5, 385 5, 000 3, 869 3, 652 2, 730 2, 388 1, 720 1, 080 600 300 240 240 240 100 125 60	10, 950 15, 915 14, 673 8, 754 12, 150 7, 018 5, 770 8, 100 6, 129 4, 515 5, 970 3, 500 1, 950 1, 950 1, 950 555 490 540 320 250 114
	Total		14,074	37,794	5, 195	57,063	\$111,841
	Total—25 mines		52,910	66, 146	16,577	135, 633	\$224,885

Mines reported for 1909, 25. New mines, 1. Abandoned mines, 1. Mines in 1910, 25.

Second District-1910.

Disposit Outp	cion of out.	for blastin	on.	E	mploy	ės.		Acci	dents.	solid or	Ani	mber of imals ider- und.
Tons loaded on ears for shipment.	Other purposes.	Kegs of powder used for blasting coal,	Days of active operation.	Average number of miners	All other employés.	Total.	Tous mined by hand.	Killed.	Injured.	Blasting coal—From	Horses.	Mules.
58,860 1,725 3,565	4,555 7,430 2,435	2,239	232 180 270	90 22 5	25 5 4	115 27 9	63,415 9,155 6,000			Solid do		
64,150	14,420	2,359	227	117	34	151	78,570					
	160 125 60	250	200 200 195 164 250 240 225 183 110 200 160 90 120 100 100 100 100 100 100	20 21 12 7 10 15 8 8 10 5 6 6 5 6 4 3 1 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	2 3 2 2 2 3 3 1 1 1 2 1	22 24 14 9 13 15 9 9 13 6 7 7 7 4 4 4 1 2 2 3 1 1 2 1 1 2 1 2 1 2 1 2 1 2 1 2	7,300 7,290 6,949 5,385 5,000 3,869 3,652 3,652 2,388 1,720 1,080 960 600 390 248 240 160 125 60		1			
	57,063	325	157	151	24	175			1			
64,150	71,483	2,684	165	268	58	326	135,633		1			

Knox County-

			Ou	tput of M	dines in	Fons.	product.
Number.	Name of Operator.	Postoffice address of the mines.	Mine run.	Lump.	Other grades.	Total.	Aggregate value of total product.
2 3 4 4 5 6 7 7 8 9 100 111 122 133 144 155 166 177 188 199 200 211 222 233 244	Aaron Teel. Ben Thorn. Bibry & Paul. Jesse Hillier. Claus Bengston Chas. Gladfelter Andrew Watson N. E. Anderson Albert Walberg. F. H. Moose. S. G. McGovern P. A. Lindsay D. I. Foster. Arthur Stoan Chas. Morgan John Todd. Louis Nodine & Son J. A. King. C. B. McGrew Ell Anderson Forrest White Wm. Nelson	Soperville. Wataga. Soperville. Wataga. Soperville. Wataga. Oneida Victoria Maquon Rapatee Wataga. Victoriado. Knoxville Middle Grove Oneida Victoria. Oneida Victoria Sataga. Victoria Galesburg Galesburg Galesburg Oneida Victoria	1,600 1,500 1,000 916	8,000 5,025 4,182 3,144 1,600 1,500 1,520 1,500 600 600 600 400 300 300 300 160 166 80	360	8,000 5,025 4,182 3,440 1,600 1,600 1,500 1,500 1,500 1,500 600 600 600 600 400 400 400 400 400 800 800 800 800 8	\$14,000 8,794 8,364 5,645 2,800 2,400 2,280 2,280 2,380 2,722 1,522 1,520 1,255 600 600 600 600 240 300 240 300 600 600 600 600 600 600 60
	Total—27 mines		5,056	32,893	724	38,673	\$67,410

Mines reported for 1909, 37. Abandoned mines, 10. Mines in 1910, 27.

Second District—1910.

$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	Disposit Outp	ion of ut.	or blasting	on.	Е	mploye	s.		Acci	dents.	solid or	Ani Un	nber of mals der-	
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	Tons loaded on cars for shipment.	Other purposes,	Kegs of powder used for blasting coal.	Days of active operation.	number	All other employés.	Total.	Tons mined by hand.	Killed,	Injured.	Blasting coal—From undercut or both.			Number.
38,673 1.007 158 122 16 138 38,673 1 1		5,025 4,182 3,440 1,600 1,600 1,500 1,500 1,500 1,360 916 800 700 600 600 400 300 300 300 160 190 100 100 100 100 100 100 100 100 10	400 115 50 42	300 240 200 313 200 200 200 293 105 168 150 150 150 100 100 150 100 100 45 30	85 150 165 143 163 163 163 163 163 163 163 163 163 16	1 1 1 1 1 2 2 2	10 17 12 6 6 4 4 3 3 2 7 4 4 4 4 3 3 2 2 3 3 2 2 3 3 3 2 2 2 3 3 1 2 1 2	5.025 3.440 1.1600 1.600 1.500 1.500 1.500 1.300 916 800 600 600 400 300 200 1.900 1.900 400 300 200 1.900 400 400 400 400 400 400 400 400 400	1	1				2 3 4 5 5 6 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26

Mercer County-

			Ou	l product.			
Number.	Name of Operator.	Postoffice address of the mines.	Mine run.	Lump.	Other grades.	Total.	Aggregate value of total product.
1	SHIPPING MINES.					!	
2	Coal Valley Mining Co., No. 2. Empire Coal Co., No. 3. Coal Valley Mining Co., No. 3. Alden Coal Co., No. 7.	Gilchrist	19,011 7,896 219 6,442	36,744 31,067 14,008	42,830	164,399 81,793 22,603 6,442	\$221,345 102,241 22,709 10,307
	Total LOCAL MINES.		33,568	81,819	159,850	275,237	\$356,602
23456789	W. H. Riddell. Docherty Bros. Arthur Jones. W. P. Williams Essley Bros. J. A. Peterson. Mack Posten. B. B. Peterson. M. A. Beers. L. Guttalson. Geo. Langston.	Pre-emption Viola Aledo do New Windsor. Cable do	1,760	11, 160 2, 680 2, 800 2, 464 2, 270 1, 440 270 625 300	300 120	11,160 2,980 2,920 2,464 2,270 1,760 1,640 700 650 300 51	19,530 5,240 4,900 4,928 3,972 3,520 2,980 1,575 1,535 450 75
	Total—15 mines		2,161 35,729	24,009 105,828		26,895 302,132	\$48,705 \$405,307

Mines reported for 1909, 16. New mines, 2. Abandoned mines, 3. Mines in 1910, 15.

Second District—1910.

Disposi Out _I	Disposition of Output.		i.	Е	mploye	ás.		Acci	dents.	solid or	Ani Un	mber of mals der-	
Tons loaded on cars for shipment.	Other purposes.	Kegs of powder used for blasting coal.	Days of active operation	Average number of miners.	All other employés.	Total.	Tons mined by hand.	Killed.	Injured.	Blasting coal—From sundercut or both.	Horses.	Mules.	Number.
152,780 77,135 21,328 6,028 257,271	11, 619 4, 658 1, 275 414 17, 966	S, 662 4, 671 1, 374 270 14, 977	223 200 125 55 183	107 92 38 35 272	89 71 27 7 194	196 163 65 42 466	164, 399 \$1, 793 22, 603 6, 442 275, 237	1		Solid do do			1 2 3 4
257, 274	11, 160 2, 980 2, 920 2, 464 2, 270 1, 760 1, 640 650 300 51 26, 895	450 180 135 159 138 28 55 20 1,165	330 150 150 151 175 143 120 200 150 75 50 154	8 10 8 7 10 6 5 1 4 1 1 — 61 — 333	2 2 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	10 12 9 8 10 7 6 1 4 1 1 —————————————————————————————	11, 160 2, 980 2, 920 2, 464 2, 270 1, 760 1, 640 700 650 300 51 26, 895		8				1 2 3 4 5 6 7 8 9 10 11

Rock Island County-

			Ou	tput of M	Iines in T	Fons.	l product.
Number.	Name of Operator.	Postoffice address of the mines.	Mine run.	Lump.	Other grades.	Total.	Aggregate value of total product.
1	SHIPPING MINES. Volunteer Coal Co, No. 1	Coal Valley	3,876	2,585	1.292	7,753	\$10,857
2 3 4 5 6 7 8 9	Moline Čoal Co. Stochr & Schadt Erueka Coal Co	Carbon Cliff Coal Valley Sunny Hill Carbon Cliff Moline Hampton Moline	240 217 1,030	14,109 6,228 7,700 5,385 1,809 1,580 1,350	2,138 200 2,693 128 500 450	21,164 8,366 8,140 8,078 2,154 2,080 1,030 1,030 840 120	\$38,800 13,525 15,970 12,177 3,980 3,930 3,600 2,060 1,680 260
	Total		1,567	39,001	13,204	53,772	\$95,982
	Total—11 mines		5,443	41,586	14,496	61,525	\$106,839

Mines reported for 1909, 16. New mines, 1. Abandoned mines, 6. Mines in 1910, 11.

Second District-1910.

Disposit Out p	ion of ut.	for blasting	on.	Е	mployé	s.		Accid	Accidents.		Nun O Anii Une grou	f mals ler-	
Tons loaded on cars for shipment.	Other purposes.	Kegs of powder used for blasting coal.	Days of active operation.	Average number of miners	All other employés.	Total.	Tons mined by hand.	Killed.	Injured.	Blasting coal—From undercut or both.	Horses.	Mules.	Number.
7,303	450	470	183	10	8	18	7,753			Solid			1
	21, 164 8, 366 8, 140 8, 078 2, 154 2, 080 1, 800 1, 030 840 120	600 287 260 400 100 140 100 40 20	160 250 270 156 180 260 235 134 125 75	30 10 10 10 5 5 5 3 8 2 1	10 1 10 3 2 2 2 1 1	40 111 20 13 7 7 7 3 9 2 2	21, 164 8, 366 8, 140 8, 078 2, 154 2, 080 1, 800 1, 030 840 120						1 2 3 4 5 6 7 8 9
7,303	53,772 54,222	2,417	185	94	38	132	61,525			-			

Warren County-

			Out	put of M	fines in	Tons.	l product.
Number.	Name of Operator.	Postoffice address of the mines.	Mine run.	Lump.	Other grades.	Total.	Aggregate value of total product.
3 4 5 6 7 8	LOCAL MINE ² . H. J. Rohr. Simcox Bros. Willis Clayton F. R. Kennedy. Manuel & Wallingford Lon Beyper. August VonAch H. L. Chatterton. Thomas Caldwell D. Hartman J. G. Lee. Wm. Ruhl. Total—12 mines.	Avon Monmouth Roseville do do Monmouth Avon do Youngstown Avon		2,535		3,000 2,535 1,200 1,000 680 615 600 280 280 240 140 100	\$5,250 4,436 3,000 2,500 1,840 1,538 1,650 700 600 420 250

Mines reported for 1909, 15. Abandoned mines, 3. Mines in 1910, 12.

Second District—1910.

Shipping Mines—Recapitulation by

			Production of Different Grades in Tons.										
Counties.	Number of mines.	Mine run.	Lump.	Egg.	Nut,	Pea.	Slack.	Total.	Average value per ton- grades.				
Bureau	7	62, 188	1,024,900	16,000		223,342		1,326,430	81.455				
Fulton	22	145,975	710,898	380,892	105,666	504,397	19, 189	1,867,017	1.185				
Henry	3	38,836	28,352			11,382		78,570	1.439				
Mercer	4	33,568	81,819	73,379	3, 125	25,958	57,388	275, 237	1.296				
Rock Island	1	3,876	2, 585			1,292		7,753	1.40				
Total	37	284, 443	1,848,554	470, 271	108,791	766,371	76,577	3,555,007	\$1.296				

Local Mines—Recapitulation by

			Productio	n of Differ	ent Grade	s in Tons.			-all
Counties.	Number of mines.	Mine run.	Lump.	Egg.	Nut.	Pea.	Slack.	Total.	Average value per ton- grades.
Bureau	8	8,148	18,076		340			26, 564	82.016
Fulton	89	21, 133	84,684			5,269	1,035	112, 121	1.498
Henry	22	14,074	37,794		3,438	300	1,457	57,063	1.96
Knox	27	5,056	32,893			724		38,673	1.743
Mercer	11	2, 161	24,009			605	120	26,895	1.811
Rock Island	10	1,567	39,001			8,005	5,199	53,772	1.785
Warren	12		10,670					10,670	2.132
Total	179	52, 139	247, 127		3,778	14,903	7,811	325,758	\$1.744
Grand total	216	336, 582	2,095,681	470, 271	112, 569	781, 274	84,388	3,880,765	\$1.334

Whole number of mines reported for 1909, 199. Number of new mines opened during the year, 40. Number of mines abandoned during the year, 23. Whole number of mines reported for 1910, 216.

Counties—Second District—1910.

Disposit Output-	tion of Tons.	blasting coal.	-:		Em	ployé	s.			В	lasting Coa	1.	
for		for blas	active operation.	Unde	rgroui	nd	nd.		By hand.	ons.	<i>;</i>	-Toms.	
Loaded on ears for shipment	Other purposes.	Kegs of powder for	Days of active o	Miners.	Others.	Boys.		Total.	Pons minedB	From solid—To	indercut—Tons.	Both methods—	
1, 200, 401	126,029	5,605	1	2,853	762		-	3,925		1,326,430	_		
1,768,844	98, 173	93,051	180		1,041	17	270		1,662,887			365.817	
64, 150	14, 420	2,359	227	117	20	1	13	151	78,570	78,570			
257,271	17,966	14,977	183	272	135	5	54	466	275, 237	275, 237			
7,303	450	470	183	10	- 6		2	18	7,753	7,753			
3, 297, 969	257,038	116, 462	182	5,428	1,964	79	593	8,064	3,350,877	3, 189, 190		365,817	

Counties—Second District—1910.

Disposit Out put-	Disposition of Output-Tons.		э.		Em	ployé	ès.			В	lasting Coa	1.
Loaded on cars for shipment.	Other purposes.	Kegs of powder for blasting coal.	Days of active operation	Miners.	others.	Boys.	All above ground.	Total.	Tons mined—By hand.	From solid—'Fous,	Undereut Tons,	Both methods=Tons.
	26, 564	604	202	69			6	75	26.564			
	112, 121	4, 465	148	238	1	1	25	265	112, 121			
	57,063	325	157	151			24	175	57,063			
	38,673	1,007	158	122			16	138	38,673			
	26, 895	1,165	154	61			8	69	26,895			
	53,772	1,947	185	84			30	114	53,772			
	10,670	530	153	48			3	51	10,670			
	325, 758	10,043	156	773	1	I	112	887	325,758			
3, 297, 969	582.796	126, 505	161	6.201	1,965	80	705	8,951	3, 676, 635	3, 189, 190		365, 81

All Mines—Recapitulation by

			Productio	n of Differ	ent Grade	s in Tons.	,		all
Counties.	Number of mines.	Mine run.	Глипр.	E 888.	Nut.	Pea.	Slack.	Total.	Average value per ton- grades.
Bureau	15	70,336	1,042,976	16,000	340	223, 342		1,352,994	\$1.455
Fulton	111	167, 108	795, 582	380,892	105,666	509,666	20, 224	1,979,138	1.203
Henry	25	52,910	66,146		3,438	11,682	1,457	135,633	1.658
Knox	27	5,056	32, 893			724		38,673	1.743
Mercer	15	35,729	105,828	73,379	3,125	26, 563	57,508	302, 132	1.341
Rock Island	11	5,443	41,586			9, 297	5, 199	61,525	1.737
Warren	12		10,670					10,670	2.132
Total	216	336,582	2,095,681	470, 271	112, 569	781, 274	84,388	3,880,765	\$1.334

Counties—Second District—1910.

Disposit Output-	ion of -Tons.	ting co			Em	ployé	Blasting Coal.					
J.		or blas	eration	Und	ergroui	nd.			-By hand.	ŝ		-Tons.
Loaded on cars for shipment.	Other purposes.	Kegs of powder for blasting coal.	Days of active operation	Miners. Others. Boys. All above ground. Total.		Tons mined—By	From solid-Tons.	Undereut—Toms.	Both methods—			
1, 200, 401	152, 593	6, 209	187	2,922	762	56	260	4,000	1, 352, 994	1,326,430		
1,768,844	210, 294	97,516	154	2, 414	1,042	18	295	3,769	1,775,008	1,501,200		365, 81
64, 150	71,483	2,684	165	268	20	1	37	326	135, 633	78.570		
	38,673	1,007	158	122			16	138	38,673			
257,271	44,861	16, 142	160	333	135	5	62	535	302, 132	275, 237		
7,303	54,222	2,417	184	94	6		32	132	61,525	7,753		
	10,670	530	153	48			3	51	10,670			
3,297,969	582,796	126,505	161	6,201	1,965	80	705	8,951	3,676,635	3, 189, 190		365,81

THIRD INSPECTION DISTRICT.

FIFTH ANNUAL REPORT.

Counties-Livingston, Logan, McLean, Marshall, Menard, Peoria, Stark, Tazewell. Woodford.

JOHN DUNLOP, Inspector, Peoria.

Hon. David Ross, Secretary, State Bureau of Labor Statistics, Springfield: SIR—In compliance with section 12 of an Act of the General Assembly of Illinois, defining the duties of State inspectors of coal mines, I have the honor of herewith submitting to you the fifth annual report for the third district. The following tables give all the necessary information in regard to the number of mines, miners and other employés; the number of tons of coal produced and the disposition of the same.

The following summary for the district is presented for the year ending

June 50, 1910.	
Number of shipping mines	46 74
Total number of mines	
Number of miners employed	3,726
Number of others employed underground	1,121
Number of boys employed underground	_95
Number of employes on the surface	546
Total number of employes	5,488
Tons of lump coal produced	
Tons of egg coal produced	
Tons of nut coal produced	
Tons of pea coal produced	447,331
Tons of slack or waste	
Total number of tons produced	2,815,979
Tons shipped on railroads	2,112,621
Aggregate value of product	118,415
Tons sold to local trade	432,983
Tons used at mines	
Number of kegs of powder used	105,494
Number of fatal accidents	7
Number of non-fatal accidents, losing 30 days	_14
Number of employés to each fatal accident	786
Tons of coal produced to each miner employed	356 756
Tons of coal produced to all employes	512
Ratio of fatal accidents per 1,000 persons employed	1.3
Average number of working days at shipping mines	193
Number of electric motors	17

The table following shows the output of each county for the years 1909 and 1910, with the increase and decrease:

Counties.	Total of Coal Al		Increase.	Decrease.	
	1909	1910			
Livingston	258, 495	237,074		21, 42	
Logan	343,582	475.536	131,954		
McLean	129, 614	101,860		27,75	
Marshall	421,552	372, 446		49, 100	
Menard	278,058	338,708	60,650		
Peoria	821,349	924,873	103,524		
Stark	20,234	28,061	7,827		
Tazewell	197,536	167,186		30,350	
Woodford	163,140	170, 235	7,095		
Total	2,633,560	2,815,979	311,050	128,63	
Net increase			182, 419		

ABANDONED MINES.

Newsam Bros. Coal Company No. 2 and Reed City.

Clark Coal and Coke Co., Empire mine. The top works were burned down and the mine abandoned.

Treasure Coal Co., near Bartonville.

NEW MINES.

Treasure Coal Co. have sunk a new shaft near Bartonville.

The following mines have constructed new escapement shafts:

Tallula Coal Co.

Phænix Coal Co. No. 1, now operated by Chas. J. Off.

Wolschlag Coöperative Coal Co.

Olympia Coal Co., Edwards.

The above named escapements are all near the working faces and of easy access to the men. They are fitted up with stairways so that the men can get out in case of danger arising at the hoisting shafts.

FATAL ACCIDENTS.

July 19, 1909, Peter Nichos, single, aged 38 years, employed as a miner in the People's Coal Company mine located at Tice. His back was injured by a fall of rock at his working place. He died the following day.

September 27, 1909, Adolph Monstrastello, aged 26 years, single, employed as a miner at the Cardiff Coal Company No. 2. He was killed instantly by

a fall of rock in his working place.

October 14, 1909, Hugh Hughes, aged 41, married, employed as a miner at a local mine, located at Sweetwater, operated by Mr. Wainwright. He was killed by a fall of rock in working place. He leaves a widow and seven children.

October 25, 1909, Leo Frankuweiz, aged 30 years, married, employed as a miner and shot firer at the Wolschlag Coöperating Coal Company's mine near Peoria. He had lighted two shots in a new room and ran up to the entry face and lighted another, and in coming back from entry face one of the shots in the room went off. His lighted lamp was blown out and he walked into the new room. His body was found covered with coal blown from the second shot, which went off after he went into the room. He leaves a widow and one child.

November 27, 1909, Thos. Lawton, aged 40 years, married, was employed as a miner at the Streator Clay Mfg. Company's mine located at Streator. He was killed by a fall of rock in his working place. He leaves a widow and

two children.

December 4, 1909, Chas. Prette, aged 34 years, married, was employed as a day laborer in mine operated by the Fairbury Coal Co., located at Fairbury. He went into a room to clean up some fallen rock. While doing so, more rock fell on him, injuring him fatally. He died a few hours after being taken home. He leaves a widow and four children.

February 17, 1910, Chas. Vignery, aged 17 years, single, employed as a top laborer at the Cardiff Coal Company's mine located at Cardiff. He was

caught between two railroad cars, causing his death.

The tables of fatal and non-fatal accidents follow, together with the county tables which give the output of coal in this district.

Respectfully submitted.

JOHN DUNLOP,

State Inspector of Mines, Third District, Peoria, Ill.

Fatal Casualties—Third District—July 1, 1910.

Date.	Name.	Age.	Occupation.	Residence. (Town.)	Married.	Single.	Widows.	Children.	Dependents.	Cause of Accident.
1910		17	Top laborer	Cardiff		1				Falling rockdodoShot exploding. Falling rock. Falling clod. Railroad cars

Recapitulation of Fatal Accidents—Third District—1910.

Residence.	No.	Occupation.	No.	Cause of Accident.	No.	Colliery.	No.
Cardiff Fairbury Peoria Streator Sweetwater Tice	1 1 1 1	Laborer Miners Shot firer Top laborer	4	Falling clod Falling rocks. Railroad cars. Shot explosion	4	Cardiff Fairbury Peoples Streator Clay Wainwright Wolschlag	1 1 1 1 1
Total	7	*****	7		7		7

Non-Fatal Casualties—Third District—July 1, 1910.

Date. Nar	ne.	Residence. (Town.)	Married.	Single.	Children.	Dependents.	Character of Injury and Cause of Accident.	Time lost—days.
Oct. 19 Bertoline B 19 Wm K. W 22 Batteste B Dec. 9 Wm. Krug 33 Frank Swa 1910 Jan. 18 Martin Sea 24 Chas. Biski Feb. 9 Leo Hand 4 John A. Ca Mar. 6 Jacob Piror 15 James Bau	antino 28 atts 26 atts 26 eusri 27 en Sou 55 nean 28 ie 38 ie 38 igan 22 rlson 65 r 20 ni 42 ghu 35	Toluca Cardiff Petersburg Pekin Wenona Petersburg Wenona Cardiff Roanoke Bloomington Wenona	1 1 1 1 1 1 1	1 1 1 1 1 1 1 1 1	1 2 3 1 8	4	Händ injured, premature blast. Body injured, pit car. Arm broken, pit cars and rib. Leg broken, pit diling slate. Ribs broken, falling coal. Händ injured, pit car and tipple Hips injured, pit car and tipple Hips injured, pit car and rocks. Body burned, steam pipe bursting. Leg broken, falling coal Leg broken, falling coal amputated. Body injured, coal falling down shaft.	32 32 90 90 60 47 90 62 30 45 60 40 90

Recapitulation of Non-Fatal Casualties—Third District—1910.

Residence.	No.	Occupation.	No.	Cause of Accident.	No.	Colliery.	No.
Bloomington Cardiff Lincoln Pekin Petersburg Roanoke Toluca Wenona	1 1 2 3 1 3	Brusher Cager. Carpenter Drivers. Miners. Timberman Top laborer. Trapper.	1 1 2 6 1	Coal fell down shaft. Falling coal. Falling slate. Pit cars. Fremature blast. Steam.	1 6 1 1	Cardiff. Lincoln McLean Co. Roanoke Soath Cut. Tazewell Toluca. Wenona.	1 1 3 2 1 1

Recapt'ulation of Non-Fatal Casualties, Nature of Injuries, Conjugal Relations and Time Lost—Third District—June 30, 1910.

Nature of Injuries,	ber.	led.	e.	ren.	ndents.	Time Lo	Percent-	
·	Number	Married	Single	Children	Depend	Total.	Average.	injuriés.
Arm broken	1 5 2 1 4 1	1 1 1	1 1 1	12 1 1 1	16 2 2 2	47 254 120 45 310 62	47 51 60 45 78 62	7.14 35.72 14.29 7.14 28.57 7.14
Total	14	7	7	17	24	838	60	100.00

Livingston County-

			Out	Tons.	il product.		
Number.	Name of Operator.	Postoffice address of the mines.	Mine run.	Lump.	Other grades.	Total.	Aggregate value of total product.
	SHIPPING MINES.						
$\frac{1}{2}$	Cardiff Coal Co. No. 2	Cardiff Fairbury	43,886 23,812	72, 493	50,016	166,395 23,812	\$244,209 28,574
	Total		67,698	72, 493	50,016	190, 207	\$272,783
	LOCAL MINES.						
1 2 3 4 5 6	Brady Coal Co Streator Clay Mfg. Co Fairbury Miners Coop. Coal Co Ed. E. Evans. Streator Aqueduct Co W. J. McMillien	Pontiac Streator Fairbury Streator do do	11,618 12,750 85 3,156 870	4,086 4,750	943 5,330 1,500	13,503 12,750 9,501 6,250 3,156 1,707	\$18, 287 19, 125 15, 680 12, 500 4, 734 2, 863
	Total		28,479	10,336	8,052	46,867	\$73,189
	Total—8 mines		96, 177	82, 829	58,068	237,074	8345,972

Mines reported for 1909, 8. Mines in 1910, 8.

Logan County-

		Postoffice address of the mines.	Ou	1 product.			
Number.	Name of Operator.		Mine run.	Lump.	Other grades.	Total.	Aggregate value of total product.
1 2 3 4	SHIPPING MINES. Latham C. Co., North Shaft. Citizens Coal Mining Co. Lincoln M. Co., No. 1. Mt. Pulaski C. Co., No. 1. Total—4 mines.	do Mt. Pulaski	116, 408 40, 695 625 157, 728	44,376 71,095	50, 691 40, 684 35, 333 2, 529 129, 237	234,866 125,755 106,428 8,487 475,536	\$234,866 125,755 127,713

Third District—1910.

Disposition of Output.		for blastin	Employés.					Accidents.		solid		nber of mals der- und.
Tons loaded on cars for shipment.	Other purposes.	Kegs of powder used for blasting coal.	Days of active operation	Average number of miners.	All other employés.	Total.	Tons mined by hand.	Killed.	Injured.	Blasting coal—From undercut or both.	Horses	Mules.
$149.311 \\ 2,125$	17,084 21,687	2,004 1,308	187 232	223 24	102 18	325 42	$166,395 \\ 23,812$	2	2	Solid		
151.436	38,771	3 312	210	247	120	367	190,207	3	2			
	13,503 12,750 9,501 6,250 3,156 1,707	755 450 763 50 46	295 283 220 50 252 100	22 20 10 8 4 5	5 9 2	22 25 19 10 5 5	13,503 12,750 9,501 6,250 3,156 1,707	1				
	46,867	2,064	200	69	17	86	46,867	1				
151,436	85,638	5,376	202	316	137	453	237,074	4	2			

Third District—1910.

Disposition of Output.		or blasting	Employés.					Accidents.		solid or	Number of Animals Under- ground.		
Tons loaded on cars for shipment.	Other purposes.	Kegs of powder used for coal.	Days of active operation.	Average number of miners.	All other employés.	Total.	Tons mined by hand.	Killed.	Injured.	Blasting coal-From andercut or both.	Horses.	Mules.	Number.
217,583 86,253 76,666 884	17,283 39,502 29,762 7,603	11,596 5,386 4,730 757	205 192 166 180	225 103 86 16	101 82 93 10	326 185 179 26	234,866 125,755 106,428 8,487		i	Solid do do			11 00 00 00 00 00 00 00 00 00 00 00 00 0
381,386	94,150	22,469	186	430	286	716	475,536		1				

McLean County-

		Postoffice address of the mines.	Out	d product.			
Number.	Name of Operator.		Mine run.	Lump.	Other grades.	Total.	Aggregate value of total product
1 2	SHIPPING MINES. McLean Co. Coal Co. Colfax Coop. Co. Total—2 mines.	Bloomington	15,000 5,278 20,278	52,000 5,068 57,068	21,000 3,514 24,514	88,000 13,860 101,860	\$132,000 20,101 \$152,101

Mines reported for 1909, 2. Mines in 1910, 2.

Marshall County—

			Out	l product.			
Number.	Name of Operator.	Postoffice address of the mines.	Mine run.	Lump.	Other grades.	Total.	Aggregate value of total product.
	SHIPPING MINES.	•	- 1				
1 2 3 4 5	Toluca Coal Co., No. 1 and 2 Wenona Coal Co., No. 1. Fulton Co. Coal Co., No. 1. Lacon Coal Co. Barr Coal Co.	Toluca Wenona Sparland '.do	7,212 1,182 1,531	181, 204 75, 083 9, 749 4, 393 3, 849	46,511 32,318 4,353 2,054 915	234, 927 107, 401 14, 102 7, 629 6, 295	\$359,770 188,578 22,000 9,531 7,868
	•		9,925	274, 278	86, 151	370,354	\$587,747
2 3 4	LOCAL MINES. R. H. Ingram John Curtis Wm. Baughu Wm. Rear E, O. Frisby	Henry Sparland		800 600 10 150		800 600 280 210 202	\$1,200 1,200 490 320 378
	Total		532	1,560		2,092	\$3,588
	Total—10 mines		10, 457	275,838	86, 151	372,446	\$591,335

Mines reported for 1909, 8. New mines, 2. Mines in 1910, 10.

Third District—1910.

Disposit Outp	ion of ut.	for blasting	p.	E	mploy	ės.		Accid	lents.	solid or	Anii	mals der-	
Tons loaded on cars for shipment.	Other purposes.	Kegs of powder used fo	Days of active operation.	Average number of miners.	All other employés.	Total.	Tons mined by hand.	Killed.	Injured.	Blasting coal—From so undercut or both.	Horses.	Mules.	Number.
6,000 3,340 9,340	82 000 10,520 92,520	650	226 254 240	13	79 18 97	239 31 270	88,000 13,860 101,860		1	Solid			1 2

Third District—1910.

Disposit Outp	ion of ut.	for blasting	ion.	E:	mployé	ès.		Accid	lents.	solid or	Ani	nber of mals der- ind.	
Tons loaded on cars for shipment.	Other purposes.	Kegs of powder used for blasting coal.	Days of active operation.	Average number of miners.	All other employés.	Total.	Tons mined by hand.	Killed.	Injured.	Blasting coal—From undercut or both.	Horses.	Mules.	Number.
177, 420 95,899 9,749 7,029 5,795	57,507 11,502 4,353 600 500 77,462	399 395 794	227 203 206 204 197	481 185 20 15 8 709	211 89 12 4 6	692 274 32 19 14				Solid do do do			1 2 3 4 5
,	800 600 280 210 202		250 150 130 90 25	1	1	2 3 2 3 1	800 600 280 210 202			do do do			1 2 3 4 5
295,892	2,092 79,554	977	168	719	323	1,042	2,092 372,446		4				

Menard County-

			Out	put of M	lines in T	Pons.	al product.
Number.	Name of Operator.	Postoffice address of the mines.	Mine run.	Lump.	Other grades.	Total.	Aggregate value of total product.
2 3 4 5 6	SHIPPING MINES. Wabash Coal Co., No. 2. Middletown Coal Co., No. 1. Athens Mining Co., No. 2. South Mountain Coal Co., No. 1. Tallula Coal Co. Greenview Mining Co. Tice Coal Co., No. 1. Total.	Middletown Athens Petersburg Tallula. Greenview Tice	25, 756 17, 748 13, 070 7, 170 10, 162 2, 623 20, 000 96, 529	37,940 29,905 24,432 22,684 11,641 13,005	19,979 21,375 14,575 8,209 10,275 10,394 500 85,307	83, 675 69, 028 52, 077 38, 063 32, 078 26, 022 20, 500 321, 443	35,701 32,526 25,625
2 3 4 5 6	LOCAL MINES. Peter Becker Arthur Wainwright John Mallergren Brandt & Walker L. N. Biggs. Wm. Brown. C. F. Johnson Total Total—14 mines	Sweetwater Petersburgdo Tallula Athens Middletown	7,784	2,618 1,500 1,514 600 600 200	260 274 300 834	900 200 17,265	4,581 2,835 2,688 3,522 1,800 350 \$29,851

Mines reported for 1909, 15. Abandoned mines, 1. Mines in 1910, 14.

Third District—1910.

Disposit Outr	tion of out.	for blasting	ion.	E	mploy	és.		Accie	dents.	solid or	Anin	mber of mals der-	
Tons loaded on cars for shipment.	Other purposes.	Kegs of powder used for blasting coal.	Days of active operation.	Average number of miners.	All other employés.	Total.	Tons mined by hand.	Killed.	Injured.	Blasting coal—From undercut or both.	Horses.	Mules.	Number.
75,677 63,270 48,776 22,625 27,464 20,527 19,500 277,839	7,998 5,758 3,301 15,438 4,614 5,495 1,000 43,604	3,885 3,246 2,593 1,755 1,581 1,123 820 15,003	176 165 120 193 201 230 180	777 877 688 444 355 233 300 364	46 33 37 31 21 13 9	123 120 105 75 56 36 39 554	52,077		2	do do			1 2 3 4 5 6 7
	8,075 2,618 1,950 1,774 1,748 900 200	150 125 110 44 142 75	300 276 186 160 120 300 100	2 6 5 4 3 6 4	1 2 3 1 1 1	3 8 8 5 4 6 5	1,748 900 200			dododododododod			$ \begin{array}{c} 1 \\ 2 \\ 3 \\ 4 \\ 5 \\ 6 \\ 7 \end{array} $
277,839	17,265 60,869	15,649	193	394	199	39 593	17,265 338,708	2	2				

			Out	put of M	ines in '	Fons.	product.
Number.	Name of Operator.	Postoffice address of the mines.	Mine run.	Lump.	Other grades.	Total.	Aggregate value of total product
	SHIPPING MINES. Clark C. & C. Co. No. 2. Clark C. & C. Co., No. 1. Sholl Bros., No. 3. Wolschlag Cop. C. Co. Crescent Coal Co., No. 1. Applegate & Lewis, Hanna. Newsam Bros. Kingston 3. Collier Coop. C. Co. Warsaw Coal Co., Wasaw Warsaw Coal City August Reents. Olympia Coal Mining Co., No. 1. Lancaster Landing C. & Tp. Co. Newsam Bros., No. 2. German Coal Co. Aug. Reents. Third Vein Coal Co. Total.			89, 241 73, 374 12, 800 34, 682 28, 713 25, 012 20, 760 15, 928 10, 261 14, 527 15, 120 11, 086 9, 873 6, 240 2, 860	59,494 48,915 24,569 15,237 17,082 18,865 10,396 9,854 6,965 7,141 6,410 4,961 4,439 2,123 9,20 800	148, 735 122, 289 72, 887 72, 887 74, 369 44, 369 46, 733 26, 570 27, 843 22, 740 19, 800 18, 400 18, 400 16, 680 4, 000	\$163,608 134,518 80,000 80,000 80,000 54,306 54,306 54,306 54,206 56,148 30,687 35,627 32,000 22,500 22,500 10,209 8,016 6,000
10 11 12 13 14 15 16 17 11 11 11 11 11 11 11 11 11 11 11 11	Uniters Coal Co Treasure Coal Co F. P. Schmidt Hibberd, Snedden & Co Patrick Martin Mohn Coal Co Hellers Coal Coa Hellers Coal Hel	Barton villedo	26, 864 4, 356 2, 118 3, 685 316 870	11,650 7,016 8,700 8,000 4,800 4,800 4,800 2,905 2,500 2,400 2,410 1,000 1,000 1,000 1,000 681 681 682 6544 566 5485 5525 500	1,669 160 108 200 120 40	2,934 2,905 2,500 2,500 2,400 2,371 2,334 2,100 1,200 1,200 1,000 1,000 880 870 672 600 600 588 555 560 548	\$40, 296 24, 008 13, 589 13, 059 12, 000 5, 720 5, 527 6, 480 4, 400 4, 400 3, 730 4, 830 4, 830 1, 1, 600 1, 1, 600 1, 740 1, 1, 197 1, 344 2, 178 2, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1,

Third District—1910.

Disposit Outp	ion of ut.	for blasting	ion.	E1	mployé	es.		Accid	lents.	solid or	Ani	f nals der-	
Tons loaded on cars for shipment.	Other purposes.	Kegs of powder used for blasting coal.	Days of active operation.	Average number of miners.	All other employés.	Total.	Tons mined by hand	Killed.	Injured.	Blasting coal—From solid undercut or both.	Horses.	Mules.	
145, 035 118, 889 74, 517 63, 397 44, 248 46, 249 47, 002 45, 5-3 28, 351 23, 643 24, 469 22, 270 15, 108 7, 200 6, 630 3, 000 751, 856	3,700 3,400 2,152 9,440 11,235 3,120 1,304 1,200 1,304 1,304 1,355 1,130 268 2,519 50 1,000 48,138	7, 867 7, 436 2, 275 3, 380 3, 240 2, 523 2, 559 1, 749 2, 500 1, 508 1, 420 1, 050 1, 025 7, 025 7, 025 9, 090 40	198 193 190 200 170 198 178 245 204 169 146 211 150 26 103 180 154 50	144 114 90 40 75 59 53 30 30 30 37 22 40 24 30 14 14 20	74 56 32 34 23 30 18 17 12 10 21 19 16 15 11 6 15	218 170 122 74 98 89 71 47 42 40 58 34 59 40 45 25 20 35	143, 735 122, 289 30, 167 44, 421 45, 483 49, 369 48, 908 46, 733 22, 790 19, 500 18, 400 15, 376 5, 199 6, 690	1		SoliddoBothdoSoliddododododododo.			
	26, 864 18, 272 10, 803 8,700 4, 800 3, 813 3, 685 3, 400 2, 500 2, 500 2, 510 1, 200 1, 200 1, 200 1, 200 1, 200 880 880 880 690 690 598, 585 560 548 530	1, 200 1, 200 1, 200 378, 550 700 480 260 1455 252 2755 90 150 500 121 290 200 10 552 82 253 253 30 30 30 355	276 2277 270 2000 150 150 150 150 172 2 200 200 150 150 172 2 200 200 180 125 150 200 130 131 125 119 200 200 120 200 120 200 120 200 120 200 120 200 120 12	18 266 6 6 6 8 111 4 4 5 5 6 6 6 6 4 4 4 3 3 3 2 2 2 2 3 3 3 2 2 2 2 3 3 2 2 2 2 3 3 2 2 2 2 3 3	5 5 7 7 2 2 3 3 4 4 1 1 1 1 1 2 2 2 2 1 1 1 1 1 1 1 1 1	23 333 12 15 15 10 9 12 25 7 7 4 4 8 8 5 5 2 2 2 3 3 3 2 2 2 3 3 3 2 2 2 3 3 3 3	2,400 2,371 2,354 2,100 1,200 1,070 880 870 791 684 672			. do			

Peoria County-

Number.	Name of Operator.	Postoffice address of the mines.	Mine run.	rput of M	Other grades,	Tons.	Aggregate value of total product.
37 38 39 40 41 42 43 44 45 46 47	LOCAL MINES—Concluded. Wm. Simmons. Wm. Pool. Kuper Mohn. Wm. Craunn. Ash Johnson. Burdois & Swinger Frank Marie. Wm. Jones & Son. H. H. Wickwire Frank Bichligio. Total. Total—65 mines.	Chillicothe Edwards Peoria Edwards Edwards Hanna City Peoria do Mapleton Oak Hill Mapleton do	392	419 381 220 231 226 216 203 200 200 80,868 451,345		419 392 381 322 271 226 216 203 200 40 124,879	\$733 700 571 390 356 339 324 300 300 60 \$185,791 \$1,107,810

Mines reported for 1909, 70. New mines, 3. Abandoned mines, 5. Mines in 1910, 65.

Third District—Concluded.

Disposit Outp	ion of ut.	or blasting	n.	E	mployé	s.		Acció	lents,	solid or	Ani Une	mals der-
Tons loaded on cars for shipment.	Other purposes,	Kegs of powder used for blasting coal.	Days of active operation.	Average number of miners.	All other employes.	Total.	Tons mined by hand.	Killed.	Injured.	Blasting coal—From s undercut or both.	Horses.	Mules,
	419 392 381 322 271 226 216 203 200 200 40	32 28 12 14 12 12 30 15	140 200 200 164 91 74 72 70 90 90	2 2 2 2 2 2 2 1 2 2 2 2 1 2 2 2 1	1	2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	419 392 381 322 271 226 216 203 200 200 40			Soliddododododododo.		
751,856	124,879	7,619 50,348	159	1,075	463	1,538	124, 879 841, 435					

Stark County-

			Ou	tput of M	lines in T	Γons.	product.
Number.	Name of Operator.	Postoffice address of the mines.	Mine run.	Lump.	Other grades.	Total,	Aggregate value of total product.
	SHIPPING MINE.						
1	James Higbee	Wyoming	6,479	3,600	2,400	12,479	\$16,200
	LOCAL MINES.						
2 3 4	John Duncan W. B. Ballenline. Watson & Anderson. Jesse Savill. James Scott.	Elmira. Wyomingdododododododo		6,752 1,900 200	890	2,000 7,42 3,800 1,900 240	\$ 3,500 11,816 5,700 3,325 370
	Total		5,800	8,852	930	5,582	\$24,711
	Total—6 mine		12,279	12,452	3,330	28,061	\$40,911

Mines reported for 1909, 10. Abandoned mines, 3. Mines in 1910, 7.

Third District—1910.

Disposit Outr	tion of out.	for blasting	tion.	Е	mploy	és.		Accio	lents.	solid or	Ani Un	nber of mals der- and.	
Tons loaded on cars for shipment.	Other purposes.	Kegs of powder used for blasting coal,	Days of active operation.	Average number of miners.	All other employés.	Total.	Tons mined by hand.	Killed.	Injured.	Blasting coal—From undercut or both.	Horses	Mules.	Number.
10,075	2, 404	1,000	202	31	5	36	12,479			Soild			1
	2,000 7,642 3,800 1,900 240	600 300 200 137 160	100 205 200 200 225 —————————————————————	10 10 10 4 7	1 1 2 4	11 11 10 6 7	2,000 7,642 3,800 1,900 240			do do do do			1 2 3 4 5
10,075	17,986	2,397	189	72	9	81	28,061						

Tazewell County-

-			Ou	tput of M	lines in '	Fons.	l product,
Number.	Name of Operator.	Postoflice address of the mines.	Mine run.	Lump.	Other grades.	Total.	Aggregate value of total product.
2	SHIPPING MINES. Tazewell Coal Co. Eastern Coal Co Grant Bros. Champion Coal Co. Phoenix Coal Co. Total.	Pekin Peoria Pekindo Wesley City	51,503 2,500 19,947 7,066 8,557 89,573	4,972 14,930 8,140 28,042	4,812 5,570 3,200 13,582	61,287 23,000 19,947 18,406 8,557	\$65,579 28,007 24,933 23,000 10,268 \$151,787
1 2 3 4	LOCAL MINES. A. B. Cumming Cumming Bros. & Co. Marion Marteness G. Gubelhausen & Son. Total. Total 9 mines	dododo	7,084 4,800 7,000 6,342 25,226 114,799	7,117	2,446 1,200 3,646 17,228	13,047 9,600 7,000 6,342 35,989	\$15,500 11,820 8,750 7,910 \$43,980 \$195,767

Mines in 1909, 9. New mines, 1. Abandoned mines, 1. Mines in 1910, 9

Woodford County-

_			Ou	tput of M	fines in '	Fons.	product.
Number.	Name of Operator.	Postoffice address of the mines.	Mine run.	Lump.	Other grades.	Total.	Aggregate value of total product
1 2		Roanoke Minonk	706	24,381	30,799 32,381 63,180	113,473 56,763 170,235	\$158,862 141,905 \$300,767

Third District—1910.

Disposit Outp	ion of ut.	or blasting	n.	E	mployé	s.		Accid	lents.	solid or	Animals Under-		
Tons loaded on ears for shipment.	Other purposes.	Kegs of powder used for blasting coal.	Days of active operation.	Average number of miners.	All other employés.	Total.	Tons mined by hand.	Killed.	Injured.	Blasting coal—From s undercut or both.	Horses.	Mules.	Number.
57,079 5,250 4,964 16,106 8,300 91,699	4,208 17,7.0 14,983 2,300 257 39,498	1, 959 1, 413 1, 011 735 507 5, 625	196 215 189 180 75	21 40 27 30 25	80 18 9 6 14 127	101 58 36 36 39	20, 637 23, 000 19, 946 18, 406 8, 557 90, 547				•		1 2 3 4 5
91,699	13,047 9,600 7,000 6,342 35,989 75,487	738 640 200 300 1,878 7,503	200 200 250 225 219 207	23 12 10 10 = 55 198	9 2 	32 14 10 12 68	13,047 9,600 7,000 6,342 35,989			do do do			1 2 3 4

Third District—1910.

Disposit Outp	ion of ut.	or blasting	n.	Er	nployé	s.		Accid	ents.	solid or	Nun 0 Anii Un	f nals der-	
Tons loaded on cars for shipment.	Other purposes.	Kegs of powder used for eoal.	Days of active operation.	Average number of miners.	All other employés.	Total.	Tons mined by hand.	Killed.	Injured.	Blasting coal—From undercut or both.	Horses.	Mules.	Number.
96, 607 46, 491 143, 098	16,866 10,271 27,137	415	233 182 208	228 121 349	53 55 108	281 176 457	113, 473 56, 762 170, 235		3	Solid			1 2

Shipping Mines-Recapitulation by

			Production of Different Grades in Tons.									
Counties.	Number of mines.	Mine run.	Lump.	Egg.	Nut.	Pea,	Slack.	Total.	Average value per ton—all grades.			
Livingston	2	67,698	72, 493	6,787	12,776	30, 453		190, 207	1.434			
Logan	4	157,728	188,571	21,381	25, 283	76,533	6,040	475,536	1.027			
McLean	2	20, 278	57,068	5,000	6,000	4,054	9,460	101,860	1.493			
Marshall	5	9,925	274, 278		6,801	66, 473	12,877	370,354	1.587			
Menard	7	96, 529	139,607	1,713	19, 166	51,084	13,344	321, 443	1.176			
Peoria	18	191,349	370, 477		60,704	167, 229	10, 235	799,994	1.153			
Stark	1	6, 479	3,600		900	1,500		12,479	1.298			
Tazewell	5	89,573	28,042		771	9,968	2,843	131, 197	1.157			
Woodford	2	706	106,349	25,808	1,932	28,744	6,676	170, 235	1.766			
Total	46	640, 265	1, 240, 485	60, 689	134, 333	436,038	61, 495	. 2,573,305	\$1.271			

Local Mines-Recapitulation by

Counties.	Number of mines.		Production	n of Differ	ent Grade	s in Tons.			Average value per ton—all grades.
	ber of	run.		**					ige va
	Num	Mine run.	Lump.	Egg.	Nut.	Pea.	Slack.	Total.	Avera
Livingston	6	28, 479	10,336			7,773	279	46, 867	\$1.562
Marshall	5	532	1,560					2,092	1.715
Menard	7	7,784	8,647			834		17,265	1.729
Peoria	47	39, 165	80,868				4,846	124,879	1.488
Stark	5	5,800	8,852			930		15,582	1.585
Tazewell	4	25, 226	7,117			1,756	1,890	35,989	1.222
Total	74	106,986	117,380			11, 293	7,015	242,674	\$1.488
Grand total	120	747, 251	1,357,865	60, 689	134, 333	447,331	68, 510	2,815,979	\$1.311

Whole number of mines reported in 1909, 128. Number of new mines opened during the year, 6. Number of mines abandoned during the year, 14. Whole number of mines reported for 1910, 120.

Counties—Third District—1910.

Disposit Output–	ion of -Tons.	ting coal.	Employés.					Blasting Coal.				
Loaded on cars for shipment.	Other purposes.	Kegs of powder for blasting coal.	Days of active operation.	Miners.	Others.	Boys.	All above ground.	Total.	Tons mined—By band.	From solid-Tons,	Undercut—Tons.	Both methods—Tons.
151, 436	38,771	3,312	210	247	82	4	34	367	190, 207	190, 207		
381,386	94, 150	22, 469	186	430	196	16	74	716	475,536	475,536		
9,340	92,520	650	240	173	70		27	270	101,860	101,860		
295,892	74, 462	794	207	709	174	43	105	1,031	370,354	370, 354		
277,839	43,604	15,003	181	364	119	6	65	554	321,443	321, 443		
751,856	48, 138	42,729	183	866	290	17	114	1,287	716, 556	636,769	4,000	159, 225
10,075	2, 404	1,000	202	31	3		2	. 36	12,479	12,479		
91,699	39,498	5,625	195	143	104		23	270	90,547	69,910		61, 287
143,098	27,137		208	349	76	6	26	457	170, 235	170, 235		
2, 112, 621	460,684	91,582	193	3,312	1,114	92	470	.4,988	2,449,217	2,348,793	4,000	220, 512

Counties—Third District—1910.

Disposit Output-	ion of Tons.	ing coal.			Em	ploye	śs.			Blasting Coal.			
Loaded on cars for shipment.	Other purposes.	Kegs of powder for blasting coal.	Days of active operation.	Miners.	Others.	Boys.	All above ground.	Total.	Tons mined—By hand.	From solid—Tons.	UndercutTons.	Both methods—Tons.	
	46,867	2,064	200	69			17	86	46,867				
	2,092	183	129	10			1	11	2,092				
	17,265	646	206	30			9	39	17,265				
	124,879	7,619	159	209		3	39	251	124,879				
	15,582	1,397	186	41			4	45	15,582				
	35,989	1,878	219	55	7		6	68	35,989				
	242,674	13,787	170	414	7	3	76	500	242,674				
2, 112, 621	703,358	105, 369	178	3,726	1,121	95	546	5,488	2,691,891	2,348,793	4,000	220,512	

All Mines-Recapitulation by

			Production	n of Differ	ent Grade	s in Tons.			=
Counties.	Number of mines.	Mine run.	Lump.	Egg.	Nut.	Pea.	Slack.	Total.	Average value per ton—all grades,
Livingston	8	96, 177	82,829	6,787	12,776	38, 226	279	237,074	\$1.459
Logan	4	157,728	188, 571	21,381	25, 283	76,533	6,040	475, 536	1.027
McLean	2	20, 278	57,068	5,000	6,000	4,054	9,460	101,860	1.493
Marshall	10	10, 457	275,838		6,801	66, 473	12,877	372, 446	1.588
Menard	14	104, 313	148, 254	1,713	19, 166	51,918	13,344	338,708	1.204
Peoria	65	230, 514	451,345		60,704	167, 229	15,081	924,873	1.197
Stark	6	12, 279	12, 452		900	2, 430		28,061	1.458
Tazewell	9	114,799	35, 159		771	11,724	4,733	167,186	1.171
Woodford	2	706	106, 349	25,808	1,932	28,744	6,696	170, 235	1.766
Total	120	747, 251	1,357,865	60,689	134, 333	447,331	68,510	2,815,979	\$1.311

Counties—Third District—1910.

Disposit Out put-	tion of Tons.	sting coal.	n.		Em	ploy	és.			В	lasting Co	al.
Loaded on cars for shipment.	Other purposes.	Kegs of powder for blasting	Days of active operation.	Miners.	Others.	Boys.	All above ground.	Total.	Tons mined—By hand.	From solid—Tons.	Undercut-Tons.	Both methods—Tons.
151, 436	85,638	5,376	202	316	82	4	51	453	237,074	190, 207		
381,386	94,150	22, 469	186	430	196	16	74	716	475,536	475,536		
9,340	92,520	650	240	173	70		27	270	101,860	101,860		
295, 892	76,554	977	168	719	174	43	106	1,042	372,446	370,354		
277,839	60,869	15,649	193	394	119	6	74	593	338,708	321, 443		
751,856	173,017	50,348	166	1,075	290	20	153	1,538	841, 435	636,769	4,000	159, 225
10,075	17,986	2,397	189	72	3		6	81	28,061	12, 479		
91,699	75,487	7,503	207	198	111		29	338	126, 536	69,910		61,287
143,098	27, 137		208	349	76	6	26	457	170,235	170, 235		
2, 112, 621	703,358	105,369	178	3,726	1,121	95	546	5,488	2,691,891	2,348,793	4,000	220,512

FOURTH INSPECTION DISTRICT-1910.

FIRST ANNUAL REPORT.

Counties-Brown, Cass, Hancock, McDonough, Morgan, Sangamon, Schuyler, Scott.

THOMAS WEEKS, Inspector, Bloomington.

Hon, David Ross, Secretary State Bureau of Labor Statistics, Springfield:

Sir-In compliance with the general mining law of the State of Illinois, defining the duties of State inspectors of coal mines, I have the honor herewith to submit the first annual report of the fourth inspection district as now found, comprising the counties of Brown, Cass, Hancock, McDonough, Morgan, Sāngamon, Schuyler and Scott. The following summary gives the most important items contained in this report:

Number of counties	7
Number of mines	108
Number of shipping mines	31
Number of local mines	77
Tons of all grades of coal	5,210,622
Tons of mine run	1.163.838
Tons of lump	2,119,806
Tons of egg	442,029
Tons of nut	169,537
Tons of pea	
Tons of slack waste	121,722
Aggregate value of total product, all mines	\$5 169 095
Tons shipped from mines	4.706.433
Tons supplied to locomotives at mines	83,531
Tons sold to local trade	271,415
Tons consumed or wasted at mines	149,283
Average number of days worked, shipping mines	170
Tons mined by hand	
Tons mined by machine	
Number of miners	4,676
Number of others underground	1,954
Number of boys underground	39
Number of employes above ground	526
Total number of employes above ground	7,255
	7,295
Number of fatal accidents	59
Number of non-fatal accidents	
Number of employés to each fatal accident	806 123
Number of employes to each non-fatal accident	
Number of tons mined to each fatal accident	
Number of tons mined to each non-fatal accident	88,316

OUTPUT OF COAL BY COUNTIES.

The coal produced by the counties now forming the fourth district with the increase and decrease in tonnage is shown in the following table:

Counties.	Total Prod Grades of Cos		Increase.	Decrease.	
	1909.	1910.			
Brown	270	240		30	
Hancock	6,447	10,009	3,562		
McDonough	25,326	27,483	2, 157		
Morgan	1,445	1,708	263		
Sangamon	5, 334, 148	5, 153, 322		180,820	
Schuyler	17,372	12,582		4,790	
Scott	5,757	5,318		439	
Total	5,390,765	5,210,662	5,982	186,08	
Net decrease				180, 103	

Sangamon county, being the only county in this district with a large output of coal shows a decrease from last year of 180,826 tons; the counties of Hancock, McDonough and Morgan show slight increases.

NEW AND ABANDONED MINES.

There were no new nor abandoned mines of the shipping class in the district during the year. The usual changes occurred in the local mines, some being abondened and others opened to take their place.

IMPROVEMENTS.

The Springfield Coal Mining Company has installed a Stevens fan at its No. 2 mine, Riverton; also several new boilers at the other plants of the company. The Chicago, Wilmington & Vermilion Coal Company has installed four new Wickers water tube boilers, at its mine locater at Thayer, Illinois. The Woodside Coal Company, Springfield, has installed during the year a 10 foot Jeffery fan, electric haulage system and new hoisting cages.

FATAL ACCIDENTS.

June 23, 1909, John Beaghan, superintendent, aged 55 years, married, employed at the Republic mine of the Cantral Co-operative Coal Company, Cantrall, was crushed under a decending cage. He died from the injuries received July 15, 1909, leaving a widow and eight children.

November 3, 1909, Leonard Giebel, miner, aged 26 years, married, was burned by a premature explosion of powder in mine No. 2 of the Sangamon Coal Company, Springfield, from the effects of which he died. Deceased was in the act of pushing loose powder back into the drill hole. He leaves

November 4, 1909, Joseph Miller, shot-firer, aged 40 years, married, employed at the Spring Creek Coal Company's mine was instantly killed by a premature explosion of powder. The deceased had four shots to fire in an

entry, two in the bottom coal and two in the top but on opposite sides of the entry; he had fired the bottom shots and went back to fire the top shots; he was using squibs, and apparently had tried to fire both shots at the same time, as all of the shots were exploded, but before he could reach a place of safety he was struck by the flying coal, with the result as stated above. He leaves a widow.

December 13, 1909, Walter Smitherman, driver, aged 21 years, married, employed by the Woodside Coal Company, was instantly killed by being crushed under a loaded pit car. Deceased was driving a three mule team, from the inside parting to the shaft; on coming to a part of the road where there was a down grade he lost his light; the team stopping when they came near the bottom of the grade; the trip of seven cars ran onto the mules and Smitherman was thrown under the first car. Life was extinct when he was taken from under the car. He leaves a widow and one child.

January 13, 1910, C. A. McPharson, topman, aged 26 years, single, employed by the McLaughlin Mining Company of Alsey, Scott county, was injured by having his head caught between the top of a pit car and the roof of a coal shed, causing concussion of the brain, from which he died in about six hours

after the accident.

January 24, 1910, H. W. Phares, cager, aged 38 years, single, employed by the Cora Coal Company, Sangamon county, was fatally injured while attempting to lift a pit car onto the track which was partially on the cage. The engineer hoisted the cage and the deceased was crushed between the side of the shaft and the cage. He was so badly injured that he died from the effects February 6, 1910.

March 3, 1910, John Hosko, miner, aged 37 years, married, employed in the mine of the Springfield Co-operative Coal Company was instantly killed by falling top coal in his room in the mine. He leaves a widow and four chil-

dren.

March 11, 1910, P. Kornfelt, driver, aged 24 years, married, in the employ of the Jones and Adams Coal Company, was instantly killed while going in with an empty trip; he was riding in the front end of the first car in the trip, the car jumped the track, knocking the leg from under a cross-bar letting the slate fall crushing the head of deceased between the slate and the top of the car. He leaves a widow and three children.

the top of the car. He leaves a widow and three children.

March 31, 1910, John Carter, miner, aged 60 years, widower, was instantly killed by falling of top coal in his working place, in the mine of the Auburn-Alton Coal Company, Auburn. He leaves a family of seven grown children.

FIRE FIGHTING APPLIANCES.

The fire fighting appliances required by the new law in effect July 1, 1910, has been complied with fully, by only three of the shipping mines in this district, other mines have partially complied with the law; while still a number of other mines have not done anything towards complying with the law, owing to the strike of the mines, which began April 1, 1910, and still continues at the date of this report.

MINE FIRE.

The tower and coal chutes of the Capital Coal Company was completely destroyed by fire on the night of June 8, 1910. The company is now rebuilding the top works which will be entirely of fire construction when completed.

Respectfully submitted,

THOMAS WEEKS,

State Inspector of Mines, Fourth District, Bloomington, Ill.

Fatal Casualties—Fourth District—July 1, 1910.

Date.	Name.	Age.	Occupation.	Residence. (Town.)	Single. Widows.			Children.	Dependents.	Cause of Accident.
Dec 13 1910 Jan. 13 Feb. 6 Mar. 3	John Beaghan. Lenoard Geibal. Joseph Miller. Walter Smitherman. C. A. McPharson. H. W. Phares. John Hosko. P. Kornfelt. John Carter.	25 38 37 24 60	Shot firer	W. Springfield . Springfield . Alsey . Springfielddodo . Auburn .	1 1 1 1	1 1	1 1 1 1	1 3 7	1 2 5 4 7	Cage, crushed under Powder explosion Powder explosion Pit cars Pit cars and shed Cage and side of shaft. Falling coal Pit car and cross bar. Falling coal

Recapitulation of Fatal Casualties—Fourth District—1910.

Residence.	No.	Occupation.	No.	Cause of Accident.	No.	Colliery. N	ю.
Alsey Auburn Springfield W. Springfield	. 6	Cager	2 3 1 1	Cages Falling coal Pit ears Powder explosion	2 3 2	Auburn-Alton Cantral Coöp Cora Jones & Adams McLaughlin. Sangamon Spring Creek Springfield Coöp. Woodside.	I 1 1 1 1 1 1 1
Total	9		9		9		9

Non-Fatal Casualties—Fourth District—July 1, 1910.

Date.	Name.	Age.	Residence. (Town.)	Married.	Single.	Children.	Dependents.	Character of Injury and Cause of Accident.	Time lost—days.
1 9 16 20 21 23 26 28 Aug. 5 Sept. 3	Leo Cunningham Geo. Belfus John McLaughlin John Senchi Thomas Warren William Passemick	49 28 20 22 31 21 40 49 30 20 38	Springfield. Pawnee. Springfielddo Pawnee. Auburn Divernon Pawnee Springfield Auburn Pawnee	1 i	1 1 1 1 1 1 1 1	5	6	Arm broken, fell down shaft Eye destroyed, flying spike Shoulder and leg injured, falling shate Leg and chest injured, falling pit ear Back injured, pit car and roof. Itead injured, kicked by mule. Knee injured, falling coal Abdomen injured, kicked by some coal Leg broken, between pit cars Finger crushed, lifting motor Leg broken, falling slate Leg broken, falling slate Hand crushed, pit cars	40 * 31 30 30 56 60 60 * 90 30 74 90 45

Non-Fatal Casualties—Fourth District—Concluded.

Date	000		Age.	Residence. (Town.)	Married.	Single.	Children.	Dependents.	Character of Injury and Cause of Accident.	Time lost—days
190: Sept.	9 17 18 21 25	Tom Oseland John Norick Thomas Ovington Robert Hall Ludwig Soliar	41 29 30 25 22	Pawnee	i	1 1 1	5	6 1	Arm broken, pit cars	42 53 55 45
Oct	- 1	Thomas Clifford Robert Dawson John Kellar H. Heads M. Ashland, Sr				1		₇	pit car. Shoulder injured, falling slate Body and foot injured, falling coal Legs crushed, motor and pit car Back injured, falling slate Back and leg injured, falling	58 * 121
Nov.	29 1	John Parsley John Carrol	34 40	do Springfield	1		5 1	2	clod. Shoulders bruised, pit cars. Collar bone and two fingers bro- ken, rib and pit car.	57 35 90
Dec.	$^{1}_{28}$ $^{7}_{7}$	Henry Fraseo John Negro Ralph Yonkus Joe Dumsky Luke Waters	48 28 28 28 28 23	Riverton Pawnee Rivertondo Springfield	1	1 1 1 1 1	4	5	Leg broken, cause unknown Head injured, falling slate Foot injured, top door falling Head injured, cross bar and pit	104 42 30 62
1910	13 23 28	Sam Benick	24 32 35	Pawnee do Virden	i	1	3	 4	Fingers blown off, dynamite cap Fingers injured, pit car Foot torn off, machine chain	32 60 *
Jan.		Robert Brown Anton Gorenty Lee Hopp Edward Fines. Staney Petranskey Steve Steneilensky						 3 	tor and timber. Body injured, pit car. Back injured, rib and pit car. Leg injured, flying coal. Back injured, rib and pit car. Feet crushed and amputated,	* 84 63 35 48
Feb.	23 31 31 3 5	John Johnson John Davis Max Twigg Tim Bresman John Blass Jas, Fanning Daniel W, Finey	35 27 26 62 30	do	1 1	i i	7	1 1 1 6	pit cars. Body burned, gas explosion. Foot injured, tail chain. Body injured, mule and pit car. Hips injured, falling slate. Finger injured, pit cars. Body injured, pit cars. Face and arms burned, pre-	30 45 30 60 30 54
Mar.	11 12 18 2	Joseph Semanak Daniel Hook Silas Smith George Barlow Louis Newman	19 40 21 40	Thayer Riverton Springfield Keyes	1 1 1		3	4 1 5	mature blast. Leg injured, pit cars Leg injured, falling slate. Finger injured, pit car. Leg and wrist broken, falling coal. Face and hands burned, gas explosion	60 30 40 30 120
									Collar hone and ribs broken,	68 68
May	10 25 26 26 12	J. P. Carroll. Sam Mottershaw. Joe Loftus. Peter Sherlock William Neece.	46 18 24 43 56	do		1	4 3	5 2	Leg broken, pit car. Leg and arm injured, pit car. Abdomen crushed, pit car. Back broken, falling coal. Back and hips injured, falling rock.	- 60 30 60
		Total			29	30	81	105	5	

^{*} Not recovered nor returned to work July 1, 1910.

and the state of t	
Total number injured.	59
Not recovered July 1 1910	8
Number recovered July 1, 1910	51
Time lost by men recovered, days.	2,812
Average number days lost by men recovered	05.14

Recapitulation of Non-Fatal Accidents, Residence, Occupation, Cause of Accident, Colliery—Fourth District—1910.

Residence.	No.	Occupation.	No.	Cause of Accident.	No.	Colliery.	No
Auburn Colchester Diverson. Keys Reys Rewnee Riverton Springfield Thayer	1 3 1 18 4 20 6	Cagers Car couplers Car couplers Car wary men Drivers Drivers Jackman Laborers Machine man Motorman Motorman Mule feeder. Shot firers Timbermen. Tracklayers Trapper	21 31 11 32 11 15 11 12 22 2	Coal falling down sh Dynamite cap. Palling coad. Falling rock Falling rock Falling shate Flying coal. Flying spike. Gas explosion. Kicked by mule. Mining machine. Motors. Pite ars Premature shot. Tail chain. Trap door. Unknown.	1 6 3 1 9 1 1 2 2 1 3 24 1 1	Black Diamond Cantrall Capitol Coöp Cicago W. & V. Cicago W. & V. Guy, J. M. Illinois Midland Madison Coöp Sangamon Springfield Spring Creek Springfield Coöp Standard Wash Tuxhorn Woodside.	1
Total	59		59		59		

Recapitulation of Non-Fatal Casualties, Nature of Injuries, Conjugal Relations and Time Lost—Fourth District—June 30, 1910.

Nature of Injuries.	Number.	Married.	Single.	Children.	Dependents.	Time Los	st—Days. Average.	Percentage of injuries.
A bdomen injured Arms broken. Backs broken. Backs lnjured. Bodies injured. Collar bones broken. Eve destroyed Faces injured Fingers injured Feet injured. Fool amputated Groin injured Hands injured Hands injured Hips injured Knee injured. Knee injured. Shoulder dislocated Shoulder dislocated Shoulder sinjured Legs broken. Legs injured. Shoulder dislocated Shoulder dislocated Shoulder sinjured.	1 1 4 1	1 1 1 4 2 1 1 2 1 1 2 1 1 1 2 1 1 1 2 1 1 1 2 1 1 1 1 1 1 1 2 1 2 1 2 1 2 1 2 1 2 1 2	1 2 1 3 4 1 1 4 1 3 3 4 1 1 3 4 1 1 3 3 4 1 1 3 3 3 3	5 3 4 18 2 2 1 4 5 7 18 5 7	6 4 5 20 5 2 4 7 1 3 4 1 1 1 6 7 7	60 137 428 294 153 120 182 107 90 45 192 60 60 60 538 210 31 105	30 46 61 49 77 60 36 36 90 45 48 80 60 77 35 31 35	3.39 5.08 3.39 11.86 10.17 3.39 9.47 5.08 1.7 1.7 6.78 1.7 1.7 1.7 6.78 1.7 1.7 1.7 6.78

Sangamon County-

					•		Ü
			Ou	tput of Mi	nes in To	ns.	l product.
Number.	Name of Operator.	Postoffice address of the mines.	Mine run.	Lump.	Other grades.	Total.	Aggregate value of total product
	SHIPPING MINES.						
2 3 4 4 5 6 6 7 7 8 9 100 111 122 133 144 155 166 177 188 199 200 223 234 225 266 277 288 29	Chi., Wil. & Ver. C. Co., No. 1. Springfield Coal Mining Co., No. 2. Ill. Midland Coal Co., Victor Jones & Adams Coal Co., Victor Jones & Adams Coal Co., No. 1. Springfield Coal Mining Co., No. 5. Springfield Coal Mining Co., No. 5. Springfield Coal Mining Co., No. 6. Springfield Coal Mining Co., No. 1. Chicago-Springfield C. Co., Co., No. 1. Chicago-Springfield C. Co., Co., Co. Chicago-Springfield C. Co., Co., Springfield Co., No. 2. Tuxhorn Coal Co., Tuxhorn West End Coal Co. Citizens Coal Mining Co., B. Barclay Coal & Mining Co., B. Barclay Coal & Mining Co., B. Springfield Coap. Coal Co. Williamsville Coal Co. Williamsville Coal Co., Coantrall Coap. Co., Cantrall Coap. Co., Coantrall Coap. Co., Cantrall Coa	Riverton Pawnee Springfield Divernon Springfield Sherman Springfield Sherman Springfield Auburn Springfield .do .do .do .do .do .do .do .do .do .d	20, 800 87, 076 85, 250 34, 207 59, 636 52, 708 48, 221 50, 229 100, 289 41, 045 19, 604 49, 386 4, 624 21, 219 9, 899 21, 942 25, 554	90, 689 175, 808 143, 514 115, 258 185, 538 80, 233 127, 783 55, 548 55, 548 56, 671 76, 694 77, 607 38, 810 38, 810 3	109, 189 70, 453 152, 682 68, 715 79, 099 42, 330 99, 479 69, 244 48, 048 48, 048 49, 812 41, 949 21, 942 42, 942 43, 406 12, 851 126, 711 33, 680 17, 839 17, 061 2, 300 23, 120	382, 540 360, 906 361, 906 348, 940 341, 531 315, 627 242, 449 217, 216 167, 195 164, 887 167, 887 167, 888 15, 539 79, 882 64, 609 57, 780 56, 518	\$336, 722 332, 033 354, 902 322, 322 323, 324 290, 376 290, 376 219, 090 110, 215 162, 550 162, 550 162, 550 102, 976 103, 977 104, 977 105, 977 106, 977 107, 976 108, 677 109, 976 109, 976 109, 976 109, 976 109, 977 100,
	LOCAL MINES,			2,000,010	-,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	3,010,001	-,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,
1 2 3 4 5	Lincoln Park C. & B. Co Number Twelve Coal Co John Derry. Cunister & Davis. E. Galladay.	Pleasant Plains Salisbury Pleasant Plains	16,803 13,864 3,200	22, 399 1, 600 1, 043 740	15,596 600 350 160	54,798 13,864 5,400 1,393 906	\$59,759 17,330 10,000 2,035 1,812
	Total	i	33,867	25,782	16,712	76,361	\$90,936
	Total—36 mines		1,145,392	2,081,601	1,926,329	5, 153, 322	\$5,060,701

Mines reported for 1909, 37. New mines, 1. Abandoned mines, 2. Mines in 1910, 36.

Fourth District-1910.

Disposit Outp	ion of ut.	for blasting	ion.		nployé	s.		Accid	lents.	solid or	Num o Anii Uno grou	f nals ler-	
Tons loaded on cars for shipment.	Other purposes.	Kegs of powder used for blasting coal.	Days of active operation.	Average number of miners.	All other employés.	Total.	Tons mined by hand	Killed.	Injured.	Blasting coal—From undercut or both.	Horses.	Mules.	Number.
347, 326 342, 948 342, 395 341, 211 327, 248 308, 788 280, 666 182, 507 212, 209 119, 387 119, 387 119, 387 119, 387 119, 387 119, 547 119, 547 119	35, 214 17, 958 12, 307 7, 722 13, 283 6, 897 59, 902 4, 977 78, 810 5, 205 4, 600 4,	4, 104 16, 358 15, 250 17, 787 3, 239 14, 304 13, 720 11, 341 9, 589 10, 388 1	1877 2002 2144 1588 2144 1500 1900 1800 1901 1955 1699 1777 1788 1691 1691 1797 1797 1797 1502 1691 1691 1797 1797 1797 1797 1797 1797	2899 288, 2500 2500 2000 2000 1544 115 115 124 111 1100 90 90 90 1102 95 55 1200 1000 82 200 1000 1100 1100 1100 11	451 877 944 91 103 80 80 80 80 80 74 75 55 54 41 40 40 47 47 47 47 47 47 47 47 47 47 47 47 47	451 3766 3823 3414 403 398 290 290 220 220 250 221 260 156 164 149 155 130 131 131 142 142 155 156 156 156 156 156 156 156 156 156	360, 906 354, 902 348, 940 5, 900 5, 900 315, 627 285, 643 242, 409 217, 216 198, 197 150, 091 147, 431 136, 618 101, 110 26, 638 101, 110 26, 638 27, 888, 361 86, 924 81, 539 79, 882 68, 518 67, 688 64, 609 57, 780 44, 848	1 1 1 1 1 1 1 1	18 3 2 1 3 3 3 3 1 4 1 2	Solid do			1 2 3 4 4 5 6 6 7 7 8 9 10 11 11 12 13 14 14 15 15 16 17 18 19 20 21 22 23 24 26 26 26 27 28 29 20 20 20 20 20 20 20 20 20 20 20 20 20
4,706,433	370,528 54,798 13,864 5,400 1,393	2,390 569 150 200	181 175 208 160	75 10 9 3 2	2,539 12 6 2	87 16 11 3	54,798 13,864 5,400 1,393		58	dododo			1 2 3 4
4,706,433	906 76,361 446,889	3,379 224,692	142 173 171	99 4,435	21 2,581	120 6,995	906 76,361 4,436,151	8	58	Solid			5

Schuyler County—

_							
			Ou	tput of 1	dines in '	Tons.	l product.
Number.	Name of Operator.	Postoffice address of the mines.	Mine run,	Lump.	Other grades.	Total.	Aggregate value of total product.
3 4 5 6 7 8 9 10 11 12	Ray Tile Works Carle & Spillers. W. M. Cumming. Frank Vogler. Ralph Strong. Ralph Strong. J. A. Dodds. E. E. Vogler. Chas. Foster.	Ray Frederick Rushville Burmingham Pleasant Viewdo Frederick	240 108	801 720 320 300 280		5,850 1,203 1,050 801 850 720 700 320 300 280 240 108	\$7,062 1,800 1,785 1,690 1,275 1,080 1,080 640 375 350 420 216
	Total		10,011	2,571		12,582	\$17,353

Mines reported for 1909, 12. New mines, 1. Mines in 1910, 13.

Fourth District—1910.

Disposit Outp	on of ation.		ed for blasting ration.		Employés,		iđ.	Accid	solid		Number of Animals Under- ground.		
Tons loaded on cars for shipment.	Other purposes.	Kegs of powder used for blasting coal.	Days of active operation.	Average number of miners.	All other employés.	Total.	Tons mined by hand	Killed.	Injured.	Blasting coal—From undercut or both.	Horses.	Mules.	Number.
	5,850 1,203 1,050 801 860 720 700 320 320 280 240 240 108		200 215 195 266 180 120 160 200 70 120 75 130 75	4 4 4 2 2 4 4 4 4 1 3 3 2 2 1 1 2 2 3 6	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	55 22 4 51 33 22 1 2 40	5,850 1,203 1,050 801 860 720 700 320 300 280 240 108 150						1 2 3 4 5 6 7 8 9 10 11 12 13

Scott County-

-			Ou	Fons.	product.			
Number.	Name of Operator.	Postoffice address of the mines.	Mine run.	Lump.	Other grades.	Total.	Aggregate value of total product.	
1 2 3 4 5 6 7 8 9	LOCAL MINES. McLaughlin Mining Co. John McGuire. James A. Jones Ben & Josh Hempworth. Walton Armitage. George Sellass. Pat McGuire. R. T. Brown. Ed. Ranft. Total.	Exeter	1, 245 800 636 416 400 361 196 4,054	704 560		1, 245 800 704 636 560 416 400 361 196	\$2,179 1,400 1,408 1,113 1,120 624 700 722 392	

Mines reported for 1909, 10. Abandoned mines, 1. Mines in 1910, 9.

Brown County-

			Ou	tput of M	fines in '	Γons.	product.
Number.	Name of Operator.	Postoffice address of the mines.	Mine run.	Lump.	Other grades.	Total.	Aggregate value of total product.
1 2	LOCAL MINES. G. F. Holtkamp. M. W. Bates. Total.	Mt. Sterlingdo	160	80		160 80 240	160

Mines reported for 1909, 2. Mines reported in 1910, 2.

Fourth District—1910.

Disposit Outp	tion of out.	for blasting	ion.		mploy	és.		Accie	lents.	solid or	Ani	nber of mals der-	
Tons loaded on cars for shipment.	Other purposes.	Kegs of powder used for blasting coal.	Days of active operation.	Average number of miners.	All other employés.	Total.	Tons mined by hand.	Killed.	Injured.	Blasting coal—From undercut or both.	Horses.	Mules.	Number.
	1,245 800 704 636 560 416 400 361 196 5,318		150 240 225 200 125 50 225 220 100	8 3 2 4 2 4 1 5 2 31	3	111 32 44 22 55 11 55 2	1,245 800 704 636 560 416 400 361 196	1					1 2 3 4 5 6 7 8 9

Fourth District—1910.

Disposit Outr	tion of out.	ed for blasting	ration.	E	mploy	és.	nd.	Accie	lents.	From solid or oth,	Ani	nber of mals der- und.	
Tons loaded on co	Other purposes.	Kegs of powder used coal.	Days of active operation.	Average number of miners.	All other employés.	Total.	Tous mined by hand	Killed.	Injured.	Blasting coal—Fro undercut or both,	Horses.	Mules.	Number.
	160 80 240		90 125 107	2 1 3		2 1 3	160 80 240						1 2

Hancock County-

_			Ou	tput of 1	Aines in '	Fons.	product.
Number.	Name of Operator.	Postoffice address of the mines.	Mine run.	Lump.	Other grades.	Total.	Aggregate value of total product
1 2 3	LOCAL MINES. W. C. Courtney E. W. Miller Meridith Bros. Total.	do	-	8,000 1,499 510 10,009		8,000 1,499 510	\$18,000 3,375 1,147 \$22,522

Mines reported for 1909, 3. Mines reported in 1910, 3.

Fourth District—1910.

Disposi Outp	tion of ut.	d for blasting	ttion.	Е	mploy	és.	Ġ.	Accid	lents.	solid or	Anir	nals :	
Tons loaded on cars for shipment.	Other purposes.	Kegs of powder used for blasting coal.	Days of active operation.	Average number of miners.	All other employés.	Total.	Tons mined by hand.	Killed.	· Injured.	Blasting coal—From undercut or both.	Horses.	Mules.	Number.
	8,000 1,499 510 10,009		250 290 208 249	4 5 6 ——————————————————————————————————	1 1	4 5 7 16	8,000 1,499 510 10,009						1 2 3

McDonough County-

						Ü	
_			Oi	utput of 1	Mines in	Tons.	l product.
Number.	Name of Operator.	Postoffice address of the mines.	Mine run.	Lump.	Other grades.	Total.	Aggregate value of total product.
	LOCAL MINES.						
2 3 4 5 6 7	John Wilson. Charley Adkison. W. H. Robinson. J. M. Gray. C. E. Waddill.	do		3,272 1,517 1,440	80	3,352 1,577 1,440 1,344 1,100 1,020	\$12,742 6,704 3,100 3,060 2,730 2,200 2,260
- 12	T. E. Wilson Joseph Bunt Fox Bros Sam Oldham C. P. Sweeny	ColchesterdoVermont		840 680 640 600 568 480 470		840 680 640 600 568 480 470	1,680 1,360 1,600 1,350 1,136 960 1,050
15 16 17 18 19 20	Wm. Malen Harp & Gilgore. Lee Maclure. Curry Veel. Lee Maclure. W. L. Stoneking	ColchesterdododoMacombColchesterBirmingham	240	432 411 160 400 160 400		432 411 400 400 400 400	972 825 660 800 650 800
22 23 24 25 26	J. O. Thompson Amos Adkins J. W. Kipler Wayland Bros Thos. Nelson S. M. Malard Harp & Kilgan	Colchesterdododododododo		361 334 320 320 320 284 251		361 334 320 320 320 300 251	722 668 720 640 560 600 565
28 29 30 31 32	Eli Milliam. Elmer Swanson. Murray & Martin. Wm. M. Dickerson Fred Curtis. John Berry. Marion Maclin.	do do do do do		200 200 200 170 163	34	240 234 200 200 170 163	300 440 440 400 340 367
36 37 38 39 40	wm. Huison Kipling & Kilpling. J. E. Smith. Frank Burdick Alla Vawters. Anton Tokosick.	. do		140 130 120 116 . 88 100 88	20	140 130 120 116 108 100 88	315 260 260 260 200 175 176
41	James Wayland Henry Hocker T. L. Wulley. Total.	do		80 60 40 22,573	689	- 80 60 40 27,483	\$55,392
		1				1	

Mines reported for 1909, 42. New mines, 1. Mines in 1910, 43.

Fourth District-1910.

Disposit Outp	tion of out.	or blasting	om.	Eı	nployé	s.		Accid	ents.	solid or	Nun o Anir Uno grou	f nals ler-	
Tons loaded on cars for shipment.	Other purposes.	Kegs of powder used for blasting coal.	Days of active operation.	Average number of miners.	All other employés.	Total,	Tons mined by hand.	Killed.	Injured.	Blasting coal—From undercut or both.	Horses.	Mules.	Number.
	6,5343 3,3525 1,5777 1,440 1,100 1,2		1755 2855 2008 2008 3200 3200 3200 2000 2000 1000 1000 1000	12 0 6 7 5 5 5 2 8 3 3 3 2 5 4 4 1 2 1 1 3 3 3 3 3 3 2 2 2 4 4 2 2 2 1 4 4 4 2 2 1 1 4 4 4 1 1 2	2 1 1 1 2 2 2 2 3 3 3 3 3 3 3 3 3 3 3 3	41177755600033326444121333334204422223447221541110	6.534 3.352 1.577 1.440 1.00 8.40 6.50 6.60 6.60 6.60 6.60 6.60 6.60 6.6						1 1 2 3 3 4 4 5 5 6 6 7 7 8 8 9 9 10 111 12 13 13 14 15 16 6 17 7 18 19 20 22 1 23 32 24 5 22 9 30 31 13 2 33 33 34 4 35 36 37 38 8 39 9 40 4 41 42
	27,483		50 169	. 2 3 150	10	2 3 160	27,483		1				43

Morgan County-

			Ou	tput of M	fines in T	Fons.	product.
Number.	Name of Operator.	Postoffice address of the mines.	Mine run.	Lump.	Other grades.	Total.	Aggregate value of total product
1 2	LOCAL MINES. Glen H. Fisher	Murrayvilledo		1,228 480 1,708		1,228 480 1,708	\$2,149 840 \$2,989

Mines reported for 1909, 4. Abandoned mines, 2. Mines in 1910, 2.

Shipping Mines-Recapitulation by

			Productio	n of Differ	ent Grade	s in Tons.			-BII8-
County.	Number of mines.	Mine run.	Lump.	Egg.	Nut.	Pea.	Slack.	Total.	Average value per ton- grades.
Sangamon	31	1, 111, 525	2,055,819	442,029	152,370	1,193,730	121, 488	5,076,961	.979

Fourth District—1910.

Disposit Outp	tion of ut.	r blasting	i.	E	mploye	es.	-	Acci	dents.	solid or	Ani	mber of mals. der-	
Tons loaded on cars for shipment.	Other purposes.	Kegs of powder used for blasting coal.	Days of active operation.	Average number of miners.	All other employes.	Total.	Tons mined by hand.	Killed.	Injured.	Blasting coal—From so undercut or both.	Horses.	Mules.	Number.
			173 150 161			4 2 6	1,228 480 1,708			,			1 2

Disposit Output-	ion of -Tons.	blasting coal.			Em	ploy	s.			В	lasting Coal	l.
Loaded on cars for shipment.	Other purposes.	Kegs of powder for blass	Days of active operation	Winers.	Others.	Boys.	All above ground.	Total.	Tons mined—By hand.	From solid—Trons.	Undereut—Tons.	Both methods—Tons.
4, 706, 433	370,528	221, 313	170	4,336	1,954	94	491	6,875	4,359,790	4,353,890	382, 540	340,53

Local Mines-Recapitulation by

			Production	n of Differ	ent Grade:	s in Tons.			-all
Counties.	Number of mines.	Mine run,	Lump.	Egg.	Nut.	Pea.	Slack.	Total.	Average value per ton—all grades.
Brown	2	160	80					240	2.00
Hancock	3		10,009					10,009	2.25
McDonough	43	4, 221	22,573		655		34	27,483	2.015
Morgan	2		1,708					1,708	1.75
Sangamon	5	33,867	25,782		16,512		200	76, 361	1.19
Schuyler	13	10,011	2,571					12,582	1.379
Scott	9	4,054	1,264					5,318	1.816
Total	77	52,313	63,987		17, 167		234	133,701	1.50
The State	108	1, 163, 838	2, 119, 806	. 442,029	169, 537	1, 193, 730	121,733	5, 210, 662	.992

Whole number of mines reported for 1908, 110. Number of mines abandoned during the year, 3. Number of mines abandoned during the year, 5. Whole number of mines reported for 1910, 108.

All Mines-Recapitulation by

			Production	n of Differ	ent Grade	s in Tons.			-all
Counties.	Number of mines.	Mine run.	Lump	Egg.	Nut.	Pea.	Slack.	Total.	Average value per ton—all grades.
Brown	2	160	80					240	2.00
Hancock	3		10,009					10,009	2.25
McDonough	43	4, 221	22, 573		655		34	27, 483	2.015
Morgan	2		1,708					1,708	1.75
Sangamon	36	1,145,392	2,081,601	442,029	168,882	1, 193, 730	121,688	5, 153, 322	.982
Schuyler	13	10,011	2,571					12,582	1.379
Scott	9	4,054	1,264					5,318	1,816
Total	108	1, 163, 838	2, 119, 806	442,029	169,537	1,193,730	121,722	5, 210, 662	.992

Counties-Fourth District-1910.

Disposit Out put-	Disposition of Output—Tons.				Em	ploy	ės.			Blasting Coal.				
Loaded on ears for shipment.	Other purposes.	Kegs of powder for blasting coal.	Days of active operation.	Miners.	Others.	Others. Boys.		Total.	Tons mined—By hand.	From solid-Toms.	Undercut—Tons.	Both methods—Tons.		
	240		107	3				3	240					
	10,009		249	15			1	16	10,009					
	27,483		169	150			10	160	27, 483					
	1,708		161	6				6	1,708					
	76, 361	3,379	173	99		5	16	120	76,361					
	12,582		146	36			4	40	12,582					
	5,318		182	31			4	35	5,318					
	133,701	3,379	167	340		5	35	380	133,701					
4,706,433	504, 229	224, 692	169	4,676	1,954	99	526	7,255	4, 493, 491	4,353,890	382,540	340,531		

Coundies-Fourth District-1910.

Disposit Output	ion of -Tons.	ting coal.	Employės.							Blasting Coal.			
Loaded on ears for shipment.	Other purposes.	Kegs of powder for blasting coal	Days of active operation.	Miners. Others, Boys.		All above ground. Total.		Tons mined—By hand.	From solid-Tons.	Undercut-Tons.	Both methods—Tons.		
	240		107	3				3	240				
	10,009		249	15			1	16	10,009				
	27, 483		169	150			10	160	27, 483				
	1,708		161	6				6	1,708				
4,706,433	446,889	224,692	171	4, 435	1,954	99	507	6,995	4, 436, 151	4,353,890	382,540	340,531	
	12,582		146	36			4	40	12,582				
	5,318		182	31			4	35	5,318				
4,706,433	504, 229	224, 692	169	4,767	1,954	99	526	7, 255	4,493,491	4,353,890	382,540	340,531	

FIFTH INSPECTION DISTRICT-1910.

FIFTH ANNUAL REPORT.

Counties-Christian, Edgar, Macon, Moultrie, Shelby, Vermilion.

THOMAS Moses, Inspector, Westville.

Hon. David Ross, Secretary State Bureau of Labor Statistics, Springfield:

SIE—In compliance with the law of the State of Illinois, defining the duties of State inspectors of coal mines, I have the honor to herewith submit the fifth annual report of the fifth inspection district. The tabular statements in this report give complete information in detail regarding the coal mines operated in the several counties comprising the district.

In the summary here presented will be found the most important items of this district:

this district.	
Number of coal producing counties	6
Total number of mines	60
Shipping mines	30
Local mines	30
New mines	6
Abandoned mines	1
Total number of employés	6,470
Miners employed	4,338
Others underground	1,499
Boys underground	126
All employed above ground	507
Total tons of coal produced	3,776,768
Mine run coal	1,797,070
Lump coal	1,108,316
Egg coal	55,133
Nut coal	128,067
Pea coal	609,335
Stock coal	78,847
Aggregate value, estimated	3,939,387
Tons loaded on cars for shipment	2,983,414
Tons supplied to locomotives	100.839
Tons sold to local trade	823,508
Tons consumed or wasted at mine.	169.007
Tuns consumed of wasted at filme	170
Number of days active operation, shipping mines	3.584.205
Tons mined by hand	
Tons mined by machine	192,563
Number of fatal accidents	20
Number of non-fatal accidents	69
Number employed to each fatal accident	324
Number employed to each non-fatal accident	94
Number of tons of coal produced to each fatal accident	188,838
Number of tons of coal produced to each non-fatal accident	54,763

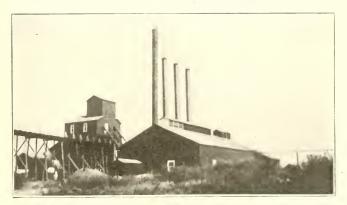
A complete table follows, giving the total tonnage by counties for the years 1909 and 1910, with the increase or decrease in each county:

Counties.	Total Output All Grad		Increase.	Decrease.	
	1909.	1910			
Christian	1,380,515	1,317,487		63,02	
Edgar	280	371	91		
Macon	197,633	265,530	67,897		
Moultre	4,800	5,520	720		
Shelby	164,095	154,393		9.70	
Vermilion	2, 221.634	2,033,467		188,16	
Total	3,968,957	3,776,768	68,708	260, 89	
Net decrease				192,18	

The coal industry has experienced a decided improvement in the last year in this district; this is most noticeable in Vermilion county.

The mines formerly owned by the Michael Kelly heirs, which have been operated by a number of persons in the past few years, was on November 1. 1909 taken over by the Bunsen Coal Company. This property was of great value to the mining industry in this county, and had been allowed to degenerate until it was in a very bad shape. The frequent changes of management together with the lack of capital to operate all of their properties resulted very disastrous to these mines, and as a result, the business people of this county, and especially of Westville, suffered accordingly.

On last November there were only three mines operating in the vicinity of Westville, where the above properties are located: Mines numbers 2, 3 and



Bunsen Coal Co. No. 3-Westville.

5 of the Kelly property had been abandoned; and, while Numbers 2 and 5 were abandoned temporarily, it was doubtful whether they would have ever opened if they had remained the property of the Kelly heirs. Mine No. 3

had been abandoned for over five years, and was entirely dismantled, and no thought was ever entertained by anyone for its re-opening; but when the Bunsen Coal Company took over this property, work was started to rebuild and renovate all of these mines and I cannot commend too highly the work accomplished by that company to date.

The company spent thousands of dollars in cleaning up and rebuilding and replacing old machinery with new; and has also been very energetic in plac-

ing the mines in a first class condition.

I especially wish to commend the management, Mr. C. F. Lynch, General Superintendent, and Mr. J. A. Halbert, superintendent of these mines, for the earnest and hearty co-operation to lessen the dangers of coal mining in the mines of their company.

This company has established an emergency hospital at each of their mines, and equipped them with a first aid equipment, and are also instructing certain employés in the work of first aid to the injured.



First Aid Hospital-Bunsen Coal Co.

This is a very humane step, when you see a man brought up out of the mine injured and taken into one of these small inexpensive first aid hospitals, and made as comfortable as it is possible to make an injured man, you will wonder why they are not provided at all times, especially when you see a man brought to the top with no provisions made for his reception, and taken into the blacksmith shop or engine room where his treatment frequently does more harm than good and I hope that the next Legislature will pass a law requiring every mine in the State to make the same provisions as here noted.

The cost of constructing and equipping a small first aid hospital such as is suggested above is about as follows:

In addition the installation of the fire fighting equipment, the Bunsen Coal Company has gone farther than the law requires, and have placed in each of its mines a thorough fire fighting equipment such that are second to none in the State of Illinois. The company is also building a stand pipe that will hold 300,000 gallons of water for the purpose of giving protection to their surface property. This company has also made a radical departure from the old system by taking care of the injured men in its employ; by creating a system of compensation for injuries received; one however, that I think is inadequate as it requires the person injured to give up his right to recover in any manner for injuries received, from the negligence of the company, before he can participate in its benefits. Further the amounts are not sufficient in the plan in force; yet it seems to me that the Bunsen Coal Company by adopting this crude plan, recognizes the injustice done an employé who is killed or injured by allowing him or his dependents to suffer for the necessaries of life, when he has committed no greater crime than trying to earn a living mining coal.

Mr. Hugh Shirkey, who was formerly general manager for the Hammond Coal Company at Westville, has organized the Fairmount Coal Company, and bought out the Jordan Coal Company at Bennett's Station. Mr. Shirkey has made a shipping mine out of this property, which was formerly operated for local trade only. The company equipped the mine in an up-to-date manner in the reference to the improvements of mines, you will see the record of the

new buildings and machinery that has been installed.

Mr. Glen Traer has organized the Traer Coal Company, which has started to open a mine between Danville and Grape Creek; I am informed that it is the intention of this company to operate extensively in the holdings of the Danville Belt Coal Company.

Mr. L. T. Mauch, who is general manager of the Tilton Coal Company at Vandercook has sunk a new mine just south of the old mine and has complied with the new law relating to the fire proofing of the shaft. The mine is concreted from top to bottom.

The Brazil Block Coal Company that operates the mines of the Dering Coal Company has re-opened mines numbers 2 and 4, which had been closed temporarily for some months.

I predict that Vermilion county will give to the world more coal next year than it has ever produced before.

IMPROVEMENTS IN MINES,

The Fairmount Coal Company, Fairmount, Vermilion county, has built a brick engine room, brick blacksmith shop, brick office and a brick fan house, also a new wooden tipple. This company installed a new sinker Davis engine 16 by 32 inches, with a four foot drum, two Atlas boilers, a fourteen foot Crawford and McCrimmen fan. Shaker screen of the Parker type, two new cages build by the Eagle Iron Works, of Terre Haute and a small electric generator, for the purpose of lighting the bottom and top. The company has also built one and a half miles of switch tracks.

The Tilton Coal Company, Vandercook installed a new pair of engines at its new mine, and put in a new boiler also erected a tipple with a shaker

screen.

The Bunsen Coal Company has made extensive improvements at its No. 1, 2, 3, 4 and 5 mines as follows: At No. 2 mine a new 150 H. P. horizontal tubular boiler has been installed; 150 new mine cars put into the mine; new timbering and curbing erected in the air and hoisting shafts; the ventilating fans and the fan house rebuilt; the old timbers in the shaft bottom have been removed and brick piers and steel I beams put in their places; a Holmes automatic car lift installed; mine haulage roads repaired, including the relaying of the main west haulage road with new 40 pound steel rails; electric light and trolley wiring renewed both inside and out; main west and main north air courses have been cleaned throughout their entire length; two hundred brick and concrete stoppings have been constructed between the inlet and outlet along the main west and main north air courses; a complete sprinkling and alarm system put in and a perfect stable constructed with brickpiers and with steel beam supports, also fire proof feed boxes.

At No. 3 mine, after it had been destroyed by fire and abandoned for five years, the outside equipment at the plant, including office building, boiler house, engine house, shop, tipple, main track, etc., have been rebuilt. The underground air courses and haulage roads have been thoroughly cleaned; new haulage tracks have been laid and fire proof shaft bottoms and the underground stable are how in course of construction.



Fairmount Coal Co .- Fairmount.

At the Little Vermilion Mine No. 1, Georgetown, the company has cleaned a considerable part of the air courses; put in service about 100 new mine cars, and one new five ton electric locomotive; also constructed a fire proof underground stable, and installed fire fighting and fire alarm equipments.

At mine No. 4 the main air courses to the east and south have been thoroughly cleaned, through their entire length; brick and concrete stoppings have been constructed between the inlet and outlet; the main haulage roads eleaned and repaired; the electric and trolley wiring inside and outside has been renewed; one new fire proof underground mine stable constructed; complete fire fighting and fire alarm equipment installed; perfect equipment of new cages hoisting ropes, shaft guides, sheave wheels, new scales and weigh pans have been installed.

At mine No. 5 the new equipment at this mine are cages, hoisting ropes, and shaft guides. The haulage roads and air courses have been cleaned and repaired throughout their entire length. The drainage system has been re-arranged and renewed and the haulage extended. Complete fire fighting and fire alarm equipment have been installed. A new office building also a new shop, and engine house have been erected.

The Pana Coal Company at Pana, has installed a new Stevens fan at its number 1 mine.

ABANDONED MINES.

The E. S. Gray Coal Company, located at Missionfield, Vermilion county, has abandoned its mine at that place on account of the water from the river breaking through into the mine but will use the main entry to haul strip coal, it is preparing to mine to the tipple.

The Lovington Coal Company at Lovington, Moultrie county, was closed by my order October 20, 1909, on account of not having the escapement shaft down in the time specified by law. I allowed the employment of a sufficient number of men to supply coal for steam purposes at the mine. The company is going ahead with the sinking of the escape shaft and will soon have it completed.

FATAL ACCIDENTS.

July 20, 1969, Clarence Nash, miner, aged 24 years, single, employed at the Little Vermilion mine of the Bunsen Coal Company located at Georgetown, Vermilion county, was instantly killed by falling rock.



A Local Mine in Vermilion County,

August 10, 1909, John Manzagle, miner, aged 49 years, married, employed by the Brazil Block Coal Company, at mine number 3, Steelton, Vermilion county, was instantly killed by falling rock at the face of his room. Deceased leaves a widow and five children.

October 11, 1909, William Marshall, miner, aged 26 years, single, was killed by falling rock on the entry of No. 4 mine of the Bunsen Coal Company at Westvilel, Vermilion county.

October 20, 1909, William P. Hoover, miner, aged 38 years, married, was instantly killed by falling coal, in the Christian County Coal Company's mine at Taylorville, Christian county.

October 28, 1909, Andrew Kulvie, shot firer, aged 30 years, married; was instantly killed by flying coal, while shooting shots for the night shift, in the Little Vermilion mine of the Bunsen Coal Company, at Georgetown, Vermilion county. He leaves a widow and three children.

November 13, 1909, George Mitro, miner, aged 26 years, single, was instantly killed by falling rock, in the Brazil Block Coal Company's mine No. 2, at Westville, Vermilion county.

December 3, 1909, William Cowell, miner, aged 29 years, married, was burned by a powder explosion, in the Christian County Coal Company's mine, located at Taylorville, Christian county. Deceased and his brother, Thomas Cowell, were working together, and had drilled their blasts, and were prepar-

ing to charge them, when a spark from a lamp fell into the powder setting it off, which burned them both badly, resulting in the death of William, on December 26, 1910. Deceased leaves a widow and two children.

December 3, 1910, John Nash, miner, aged 45 years, single; was killed by falling coal, crushing against prop in the Decatur Coal Company mine, at

Decatur, Macon county.

December 6, 1909, Gudio Secher, miner, aged 30 years, single, was killed by falling rock in the Danville Colleries Company's mine at Catlin, Vermilion county.

December 24, 1909, Steve Potsuek, miner, aged 21 years, single, was killed by falling slate, in the mine of the Moweaqua Coal Mining and Mfg. Company,

at Moweagua, Shelby county.

December 31, 1909, John Hodgson, miner, aged 29 years, married, was killed by falling rock in the E. S. Gray mine at Missionfield, Vermilion county.

December 31, 1909, Peter Guitany, shot firer, aged 36 years, single, was killed by flying coal from a blast in the Christian County Coal Company mine at Taylorville. Deceased was shooting shots by himself, while his partner was doing likewise in another entry; when the partner got through and Guitany did not come out the partner raised an alarm, secured some help, and went in search of him, finding him dead, apparently killed by flying coal.

January 3, 1910. Bertiste Firando, miner, aged 36 years, single was instantly killed by falling rock in the Bensen Coal Company's mine No. 4, at

Westville, Vermilion county.

January 24, 1910, Paul Metzola, aged 27 years, miner, single, was killed by falling slate in Smith-Lohr Coal Company's mine at Pana, Christian county.

February 15, 1910, Dominik Kinder, miner, aged 43 years, married, was instantly killed by falling rock at his working face in the Bunsen Coal Company's Little Vermilion mine, at Georgetown, Vermilion county.

March 10, 1910, Andrew Dunkavich, miner, aged 50 years, married, was killed by falling rock in his working place in the Brazil Block Coal Company mine No. 3, located at Steelton, Vermilion county.

March 16, 1910, Abe jenkins, driver, aged 47 years, single, was killed by being crushed between mine cars and the coal rib in the Bunsen Coal Company's mine No. 2, located at Westville, Vermilion county.

March 21, 1910, Joseph Phillips, miner, aged 56 years, single, was killed by falling slate, in the Decatur Coal Company's mine, located at Niantic. Macon

county.

March 24, 1910, Thomas Roberts, miner, aged 59 years, married, was killed by falling clod, in the Christian County Coal Company's mine located at Taylorville, Christian county.

March 31, 1910, D. D. Engle, miner, aged 47 years, married, was killed by falling clod in the Stonington Coal Company's mine at Stonington, Christian county.

The table of non-fatal accidents and the county tables follow all of which is, Respectfully submitted.

> THOMAS MOSES, State Inspector, Fifth District, Westville.

Fatal Casualties-Fifth District-July 1, 1910.

Date.	Name.	Age.	Occupation.	Residence. (Town.)	Married.	Sing e.	Widow.	thidren.	pependents.	Cause of Accident.
Aug. 16 Oct. 11 22 Nov. 13 Dec. 3 6 24 31 1910 Jan. 3 24 Feb. 16 Mar. 16 16 22 22 22 23 24 25 24 25 25 25 25 25 25 25 25 25 25 25 25 25	William Marshall William P. Hoover Andrew Kulvie George Mitro. *William Cowell John Nash. Gudio Secher Steve Potsuek John Hodgson Peter Guitany Bertiste Firando Paul Netzola Dominik Kinder, Andrew Dunkavich, Abe Jenkins	49 26 38 30 26 29 45 36 27 43 50 47 56 59 47	do d	Steetton Danville Taylorville Georgetown Westville. Taylorville Carlin doo. Hilbery Taylorville Taylorville Taylorville Pana Georgetown Steetton Westville Niantic. Taylorville Taylorville Taylorville Stopping Taylorville	i i i i i i i i i i i i i i i i i i i	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	1 1 1 1 1 1 1 1 1	5	6 1 FF 4 FF 1 FF 1 FF 1 FF 1 FF 1 FF	'alling rock do do do do alling coal lying coal lying coal lying coal alling rock owder explosion alling rock alling rock alling rock alling rock alling slate alling slate alling slate alling rock to coe alling rock alling slate

^{*} Died Dec. 26, 1909.

Recapitulation of Fatal Casualties—Fifth District—1910.

Residence.	No.	Occupation.	No.	Cause of Accident.	No.	Colliery. No
Catlin	2 1 1 1 1 2 1 4	Driver	17	Falling clod Falling coal Falling rock Folling slate Flying coal Pit car Powder explosion	9 3 2 1	Brazil Block Bunsen Christian County Danville Decatur Grey, E. S Moweaqua Smith-Lohr Stonington
Total	20		20		20	

Non-Fatal Casualties-Fifth District-July 1, 1910.

Date.	Name.	Age.	Residence, (Town.)	married.	Single	Children.	Dependents.	Character of Injury and Cause of Accident.	Time lost—days.
July 1 8	John Wonsock Thomas J. Smith	23 55	Panado	i	1	3	_i	Foot injured, falling slate Head cut, foot injured, falling slate	112 54
Aug. 9 10 28	Nick Trappen Andy Undo Sam. McDill Albert Karlowski	57 30 25 38	do	 i	1 1			Hip injured, falling slate. Shoulder injured, falling bar. Hand and arm injured, pit cars Leg broken, falling rock Hip injured, flying coal.	40 45 40 60
31 Sept. 7	Thomas Hill Mike Kaporwick	24 25	Taylorville	`i	1	4	5	Back broken, falling coal, crip-	40 *
	Paul Kelshauski Chas. Cekefitz James Fortune					3		Leg broken, falling rock Leg broken, falling mule Collar bone broken, fell into sump	90 90 42
	Herbert Pearson Albert Orley J. Sudicke Thomas D. Tucker					₂		Eye put out, kicked by a mule. Back injured, falling rock Shoulder dislocated, falling rock Foot mashed, falling rock	90 30 60 90
23 24 Nov. 5	Anton Shumanski James Eader Abe Gordon Thomas Thompson Arthur Woodard	\$5 50 60 40	Decatur Pana Danville	1 1 1		5 4	 6 1 1	Leg lacerated, falling rock Leg injured, falling coal. Back injured, falling slate Foot mashed, falling rock Back injured, falling rock Arm broken, pit car	90 40 30 90 60 60
18	William Jarvis William Lawrence Joe Laine Thomas Cowell	36	Danville	1		5		Ruptured, flying wood from rip saw. Leg injured, electric motor Body burned, powder explo-	180 30
-	Joe Trionis John Hopkins Joe Yokatos Mike Melouski William Rigdon Allen Carey John T. Barn		***			4	5 1	sion. Hand mashed, falling rock. Back injured, falling rock. do. do. Arm broken, falling rock.	60 40 60 60 60
	Allen Carey John T. Bann Jack Murphy					6		Arms broken, between pit cars. Back injured, hip dislocated, falling rock	60 150
	Hugh E. Moples					2	3	Back and ribs injured, falling rock. Foot crushed, locomotive, amputated.	50 *
	Anton Antolok Henry Gist Loe Misurvich	44	Taylorville	1		2		Leg broken, falling coal	120 49 60
	Joe Misurvich Louis Beelen Adam Kerczmuskis Charles Doggett							Back, leg and side injured, falling slate. Head injured, between pit cars. Head and back injured, falling	60 60
	Joseph Amberger					5 3	6	rock Back injured, falling slate Hip dislocated, between car and rib.	45 30 48
22 24 24 Feb. 1	Fortune Staucker Mike Roukis Tony Bongourni Alphonso Albertz. Noel Orlea Henry Hotell.	28 31 25 45	Westville do Pana Danville	1 1 1 1		2 1 4 3 4 4	2 5 4 5	Foot injured, falling rock Hip fractured, kicked by mule. Hand mashed, falling rock Leg broken, falling coal Leg broken, falling rock. Back broken, falling rock. crip-	30 160 60 85 *
7	Addam Kilkunos James Fogarty	22	do		1			ple for life Arm broken, head cut, falling rock Body bruised, between male	90
	Hugh Dwyer C. Marks					3	<u>-</u>	and car. Ribs broken, falling coal. Jaw broken, head cut, falling clod.	30 50 *
15	William Leonard	46	Decatur	1		3	4	Leg broken, falling coal	43

Non-Fatal Casualties—Fifth District—Concluded.

Date.	Name.	Age.	Residence, (Town.)	Married. Single.	Children.	Dependents.	Character of Injury and Cause of Accident.	Time lost lays.
19 21 24 26 Mar. 2 5 5 9 19 24 Apr. 21 26 June 1 16 16	Alex Carlier James O'Brien Joe Ziller Louis Viololli, Frank Hallcep, Roy Russell Lenard Huttes. C. Monetti Adolph Hanbensen John Wilson W. C. Kent Edward Leverenz Joe Nowatski Jacob Trover	40 32 39 26 24 24 19 16 53 46 33 20 47 56	Panado .		2 3 1 5 3	3 4 2 2 3 4 4 3 4 1 2 1 1 2 1 1 1 1 1 1 1 1 1 1 1 1 1 1	Body bruised and crushed, mule car. Body injured, falling coal. Hips injured, between car and rib. Back injured, falling rock. Leg broken, by electric motor. Ankie broken, falling rock. Leg broken, falling rock. Leg broken, falling rock. Leg broken, mine car. Hands mashed, by pit cars. Hands mashed, by pit cars. Hands mashed, falling coal. Hip injured, falling rock. Leg and hip bruised, falling rock. Leg amputated, kicked by mule thrown under truck car. Shoulder dislocated, falling bar. Leg broken, falling rock.	* 30 62 120 * 60 125 * * * * 60 120
Total nu Not reco Nur Time lo	overed July 1, 1910 nber recovered July 1, st by men recovered—	191 day	.0s					53 3,600

Recapitulation Non-Fatal Accidents, Residence, Occupation, Cause of Accident, Colliery—Fifth District—1910.

Recapitulation of Non-Fatal Casualties, Nature of Injuries, Conjugal Relations and Time Lost—Fifth District—June 30, 1910.

Nature of Injuries.									
Arms broken 4 2 2 4 6 270 67.5 5.8 Backs injured 14 9 5 31 37 750 53.57 20.29 Bodies injured 4 2 2 2 4 60 15. 5.8 Collarbones broken 2 2 2 7 9 42 21. 2.9 Eye put out 1 1 1 90 90. 1.45 5.8 Feet injured 4 3 1 3 6 322 80.5 5.8 Foot amputated 1 1 2 3 3 1.45 1.45 Hands injured 3 2 1 8 10 159 53 4.34 1.45 Hip injured 1 1 1 2 164 160 10.5 5.8 1.45 Leg supputated 1 1 1 1 2 1 <th>Nature of Injuries.</th> <th>Number.</th> <th>Married.</th> <th>Single.</th> <th>Children.</th> <th>Dependents.</th> <th></th> <th></th> <th>age of</th>	Nature of Injuries.	Number.	Married.	Single.	Children.	Dependents.			age of
Total, average and per cent 69 40 29 116 146 3,600 67.92 100.00	Arms broken Backs injured Bodies injured Collarbones broken Eye put out Feet injured Foot amputated Hands injured Heads injured Hip dislocated Hip fractured Hips injured Jaw broken Legs injured Ribs broken Rupture Shoulders injured	4 14 4 2 1 1 4 3 1 1 1 1 1 1 1 1 1 2 1 1 1 1 1 1 1 1 1	9 2 2 3 1 1 2 2 1 1 2 1 2 1 1 2 1	2 5 2 1 1 1 2 1 2 1 4 2 1 1 1	31 2 7 3 2 8 8 8 8 3 1 1 9 6 6 	37 4 9 6 3 10 10 4 2 8 8 8 	750 60 42 90 322 160 159 48 160 142 793 160 99 180 165	53.57 15. 21. 90. 80.5 40. 53. 48. 160. 35.5 72. 40. 49.5 180. 55.	5.8 20.29 5.8 2.9 1.45 5.8 1.45 5.8 1.45 1.45 1.45 1.45 1.45 1.45 1.45 1.45

Christian County-

_			Ou	tput of 1	dines in	Tons.	product.
Number.	Name of Operator.	Postoffice address of the mines.	Mine run.	Lump.	Other grades.	Total.	Aggregate value of total product.
1 2 3 4 5 6 7 8	SHIPPING MINES. Christian Co. Coal Co. Springfield C. M. Co., No. 6. Pana Coal Co., No. 1. Stonington Coal Co. Penwell Coal Co., Penwell. Smith Lohr C. M. Co. Pana Coal Co., No. 2. Assumption C. & M. Co.	Taylorvilledo. Pana. Stonington. Panadodo. Assumption.	63,803 23,706 38,885 21,123 47,178 47,864	148, 041 115, 482 88, 547 109, 389 44, 659 53, 799 30, 843 590, 760	72,735 70,025 57,106 49,965 62,333 81,590 35,865 29,938 459,557	209, 213 184, 538 180, 477 154, 170 129, 454 89, 664 60, 781	192, 475 166, 085 180, 000 164, 561 127, 568 80, 698 60, 000
1	LOCAL MINES, C. W. Vandever	_		12,305 603,065			

Mines reported for 1909, 9 Mines in 1910, 9.

Edgar County-

-			Ou	itput of M	dines in '	Γons.	1 product.
Number.	Name of Operator.	Postoffice address of the mines.	Mine run.	Lump.	Other grades.	Total.	Aggregate value of total product
1	LOCAL MINES. John N. Wellman	Paris	371			371	556

Mines reported for 1909, 1. Mines in 1910, 1.

Fifth District—1910.

Disposi Outp	Disposition of Output.			Е	mploy	es.		Accid	Accidents.		Number of animals Under-		
Tons loaded on cars for shipment,	Other purposes.	Kegs of powder used for blasting coal.	Days of active operation	A verage number of miners.	All other employes.	Total.	Tons mined by hand.	Killed.	Injured.	Blasting coal -From solid or undercut or both.	Horses.	Mules,	Number.
267, 145 158, 583 80, 547 167, 048 115, 834 46, 664 86, 164 42, 823	17, 434 50, 630 103, 991 13, 429 38, 336 82, 790 3, 500 17, 958	10, 350 7, 833 1, 406 932 1, 321 1, 034 579 260	161 168 173 167 126 131 104 143	220 212 188 175 158 151 111	65 95 53 199 73 58 53 59	285 307 241 199 248 216 204 170	284, 579 209, 213 184, 538 154, 170 129, 454 89, 664 60, 781	i i	3 4 2	Soliddo do U. C Solid do do			1 2 3 4 5 6 7 8
964,808	328,068	23,715	147	1,215	655	1,870,	1,112,399	6	27				
964,808	24, 611 352, 679	274	150	7 1,222	5	12 1,882	24,611	6	27				1

Fifth District—1910.

Disposi Out;	Disposition of Output.		tion.	E	mploye	es.		Accio	lents.	solid or	Numb of anima Unde groun	als
Tons loaded on cars for shipment.	Other purposes,	Kegs of powder used coal.	Days of active operation.	Average number of miners.	All other employes.	Total.	Tons mined by hand.	Killed.	Injured.	Blasting coal—From undercut or both.	Horses.	Mules. Number.
	371	12	60	3	1	4	371					1

Macon County-

			Ou	tput of M	lines in T	Cons.	product.
Number.	Name of Operator.	Postoffice address of the mines.	Mine run.	Lump.	Other grades.	Total.	Aggregate value of total product
1 2 3 4 5	SHIPPING MINES. Manufacturer's & Consumers C. Co. Decatur C. Co., No. 2. Decatur C. Co., Niantic. Decatur C. Co., No. 1. Blue Mound C. M. Co. Total—5 mines.	dododoBlue Mound		32,817	11,604 13,002 6,154	121, 242 60, 895 37, 356 30, 996 15, 041 265, 530	\$180, 956 119, 178 46, 190 60, 748 15, 793 \$422, 865

Mines reported for 1909, 4. New mines, 1. Mines in 1910, 5.

Moultrie County-

			Ou	tput of M	fines in T	rons.	l product.
Number,	Name of Operator.	Postoffice address of the mines.	Mine run.	Lump.	Other grades,	Total.	Aggregate value of total product
1	SHIPPING MINES. Lovington C. M. Co	Lovington	5,520			5,520	\$8,280

Mines reported for 1909, 1. Mines in 1910, 1.

Fifth District—1910.

Out	Disposition o Output.		ation.		mployé	is.	nd.	Accid	lents.	m solid or	Number of animals Underground.		
Tons loaded on car for shipment.	Other purposes.	Kegs of powder used for blasting coal.	Days of active operation.	A verage number of miners.	All other employés.	Total.	Tons mined by hand	Killed.	Injured.	Blasting coal—From undereut or both.	Horses,	Mules.	Number.
55, 032 7, 600 29, 337 12, 201 10, 041 114, 211	66, 210 53, 295 8, 019 18, 795 5, 000 151, 319	2,083 833 2,916	230 202 151 157 100	169 90 39 60 19	62 51 20 31 11	231 141 59 91 30 562	121, 242 60, 895 37, 356 30, 996 15, 041 265, 530	1 12	5	Solid do do do			1 2 3 4 5

$Fifth \ District \!\!-\!\! 1910.$

Disposit Outpo	ion of ut.	for blasting	tion.	E	mploye	es.		Acci	dents.	solid or	Ani Un	nber of mals der- ind.	
Tons loaded on cars for shipment.	Other purposes.	Kegs of powder used for coal.	Days of active operation.	Average number of miners.	All other employes.	Total.	Tons mined by hand	Killed.	Injured.	Blasting coal—From undercut or both.	Horses.	Mules.	Number,
2,045	3, 475	50	92	16	18	34				u. c			1

Shelby County-

		,	Ou	Γons.	l product.		
Number.	Name of Operator.	Postoffice address of the mines.	Mine run.	Lump.	Other grades.	Total.	Aggregate value of total product.
-	SHIPPING MINES.						
1 2	Century Coal Co., No. 1	Tower Hill Moweaqua	5,933 2,603	37,774 16,180	54, 178 27, 199	97,885 45,982	\$108,625 64,054
	Total			53,954	81,377	143,867	\$172,679
	LOCAL MINES.						
3	B. F. Stretch. D. Domas. Wm. Baum John O'Brien.	Shelbyvilledo		3,200 2,600 1,440		3,246 3,240 2,600 1,440	\$9,738 9,180 7,800 3,960
	Total		3,246	7, 240	40	10, 526	\$30,678
	Total—6 mines		11,782	61, 194	81, 417	154, 393	\$203,357

Mines reported for 1909, 9. Abandoned mines, 3. Mines in 1910, 6.

Fifth District—1910.

	Disposition of Output.		powder used for blasting active operation.		mployé	s.	d.	Accid	ents.	solid or	anir Un	nber of mals der- and.	
Tons loaded on cars for shipment.	Other purposes.	Kegs of powder used coal.	Days of active operation.	Average number of miners.	All other employés.	Total.	Tons mined by hand.	Killed.	Injured.	Blasting coal—From solid or undercut or both.	Horses.	Mules.	Number.
92, 956 33, 484	4,929 12,498	801 3,000	144 128	123 60	55 65	178 125	97,885 39,416	·····i	2	Solid Both			1 2
126, 440	17, 427	3,801	136	183	120	303	137, 301	1	2				
	3,246 3,240 2,600 1,440		290 310 250 300	10 20 10 7	2 3 3	12 23 13 7	3, 246 3, 240 2, 600 1, 440					1	1 2 3 4
126, 440	10,526 27,953	3,801	287 237	230	8 128	358	10,526	1	2				

Vermilion County-

1			Outp	ut of Mir	nes in To	ns.	al product.
Number.	Name of Operator.	Postoffice address of the mines.	Mine run.	Lump.	Other grades.	Total.	Aggregate value of total product.
	SHIPPING MINES.						
2 3 4 5 6 7 8 9	Bunsen Coal Co., Vermilion. Brazil Block Coal Co., No. 3. Bunsen Coal Co., No. 4. Brazil Block Coal Co., No. 4. Brazil Block Coal Co., Co., Co., Co., Co., Co., Co., Co.,	Georgetown Westville Danville Westville Missionfield Danvilledo	505, 519 299, 338 201, 039 37, 613 9, 560 25, 077 9, 447 64, 863 57, 825 20, 230 42, 613 33, 925	81,582 92,585 44,914 48,821 16,035 10,566 1,137	3,560 64,712 68,096 55,536 16,587 8,200 1,378 5,283 774	505, 519 302, 898 201, 039 183, 907 170, 241 125, 527 74, 855 64, 863 57, 825 44, 465 43, 991 33, 925 15, 849 7, 696	\$480, 243 288, 162 190, 987 173, 561 187, 265 113, 329 76, 509 63, 100 54, 933 52, 000 40, 908 32, 229 17, 580 10, 000
	Total		1,312.834	295,640	224, 126	1,832,600	\$1,780,799
2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18	LOCAL MINES. Reilly & Doughterty. Danville Consumers C. Co. J. W. Mauck. John Olson Sharon Coal & Brick Co. Wm. J. Watkins. Olson Bros. Wm. C. Schafer. Wm. C. Schafer. Wm. C. Schafer. Wm. C. Schafer. Wm. F. Gruns. Wm. C. Schafer. Wm. F. Gruns. James Thomas & Son. L. S. Miller. Lorenzo Balduchy. J. W. Ervin. Henry Wonderlin. S. M. Hodges & Son. Crawford Bros. M. C. Wilkinson. John Alderidge. Samuel Thomas. David C. Jones. Samuel Thomas. David C. Jones.	. do	2,970 2,652 2,500 1,000	7, \$38 3, 065 2, 120 2, 367 1, 970 200 600 1, 510	4,385 2,070 740 3,548 1,309 400 279	68, 673 26, 789 16, 000 12, 984 12, 984 12, 984 12, 986 6, 500 6, 500 6, 500 4, 771 3, 700 2, 970 2, 970 2, 970 2, 970 2, 1, 789 1, 500 618 207 287	\$68, 673 28, 124 20, 000 16, 230 19, 415 10, 201 7, 366 6, 900 9, 228 7, 500 5, 964 4, 625 4, 264 3, 712 3, 315 3, 475 5, 000 2, 250 1, 000 2, 250 1, 000 3, 358
	Total		167,326 1,480,160	20,703 316,343	12,838 236,964	200, 867	\$234,306 \$2,015,105
	10tai-30 mines		1, 200, 100	310,040	200, 004	2,000,101	,010,100

Mines reported for 1909, 39. New mines, 12. Abandoned mines, 13. Mines in 1910, 38.

Fifth District—1910.

Disposition of Output. Find Fin	Disposi Outp	tion of ut.	for blasting	ion.	Eı	mployé	S.		Accid	ents.	solid or	Num o Anir Uno gou	f nals ler-	
299, 383	Tons loaded on cars for shipment.	Other purposes.	Kegs of powder used coal.	Days of active operat	Average number of miners.	All other employés.	Total.	Tons mined by hand	Killed.	Injured.	Blasting coal—From undercut or both.	Horses.	Mules.	
68,673 1,700 305 30 27 57 68,675	299, 338, 198, 520, 181, 600, 141, 941, 124, 198, 73, 107, 64, 863, 55, 125, 42, 505, 42, 613, 32, 945, 12, 458, 7, 060	3,560 2,519 2,307 28,300 1,329 1,748 2,700 1,960 1,378 980 3,391 636	12, 088 7, 941 6, 526 7, 000 4, 561 3, 532 2, 673 2, 207 2, 223 1, 611 1, 674 741 435	180 126 121 227 71 201 253 77 223 83 96 229	300 249 325 220 410 80 66 69 48 150 42	127 126 125 57 140 47 18 97 23 65 62	427 375 450 277 550 127 84 166 71 215 104 28	302, 898 201, 039 183, 907 170, 241 125, 527 74, 855 64, 863 57, 825 44, 465 43, 991 33, 925 15, 849	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	3 3 3 2	do			
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	1,775,910	56,690	70,163	200	2,299	1,079	3,378	1,832,600	11	35				
5,886 215 191 71 262 200,867		26, 789 16, 000 12, 984 12, 943 7, 700 6, 000 5, 905 5, 915 5, 000 4, 771 3, 700 3, 279 2, 970 2, 652 2, 700 1, 789 1, 500 618	288 725 464 473 2422 120 200 100 25 290 184 130 96 60 180 222 200 180 200 200 200 200 200 200 200 200 200 2	208 300 239 224 280 180 216 190 200 300 225 241 200 250 100 240 168 45	30 10 15 15 9 6 4 8 8 5 5 2 4 4 3 3 3 3 2 2	1 2 5 7 4 1 2 3 3 3 2 1 1 1 1 2 2 2 2 2 2 2 2 2 2	34 12 20 22 13 7 6 6 11 14 17 7 3 5 4 4 7 7 6 6 7 7 7 6 2 2 1 3 3 5 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	26, 789 16, 000 12, 984 12, 943 17, 700 6, 500 6, 6000 5, 915 5, 000 4, 771 3, 7000 2, 970 2, 970 2, 1, 789 1, 500 618						
			5,886	215	191	71	262	200,867						

Shipping Mines-Recapitulation by

			Production of Different Grades in Tons.											
Counties.	Number of mines.	Mine run.	Lump.	Egg.	Nut.	Pea.	Slack.	Total.	Average value per ton- grades.					
Christian	8	242,559	590,760	2,145	51,993	353,227	52,192	1,292,876	\$.971					
Macon	5	56,678	127,714	23,861	7,202	38,311	11,764	265,530	1.596					
Moultrie	1	5,520						5,520	.150					
Shelby	2	8,536	53,954	28,927	18,783	28,130	5,537	143,867	.120					
Vermilion	14	1,312,834	295,640	200	31,838	183,514	8,574	1,832,600	.972					
Total	30	1,626,127	1,068,068	55,133	109,816	603,182	78,067	3,540,393	\$1.028					

Local Mines-Recapitulation by

			Production	on of Differ	ent Grades	s in Tons.			-all
Counties.	Number of mines.	Mine run.	Lump.	Egg.	Nut.	Pea.	Slack,	Total.	A verage value per ton- grades.
Christian	1		12,305		6,153	6,153		24,611	\$1.375
Edgar	1	371						371	1.50
Shelby	4	3,246	7,240				40	10,526	2.915
Vermilion	24	167,326	20,703		12,098		740	200,867	1.166
Total	30	170,943	40,248		18,251	6,153	780	236,375	\$1.267
Grand total	60	1,797,070	1,108,316	55, 133	128,067	609,335	78,847	3,776,768	\$1.043

Whole number of mines reported for 1909, 63. Number of new mines opened during the year, 13. Number of mines abandoned during the year, 16. Whole number of mines reported for 1910, 60.

Counties—Fifth District—1910.

Disposit Output-		ing coal.			Em	ploy	ės.			В	lasting Coa	il.
Loaded on cars for shipment.	Other purposes.	Kegs of powder for blasting	Days of active operation	Winers.	Others.	Boys.	ove ground.			From solid-Tons.	Undercut—Tons.	Both methods—Tons.
964,808	328.068	23,715	147	1,215	460	46	149	1,870	1,112,399	1,112,399	180,477	
114,211	151,319	2,916	168	377	128	14	33,	552	265,530	265,530		
2,045	3;475	50	92	16	3		15	34			5,520	
126,440	17,427	3,801	136	183	86	6	28	303	137,301	97,885		45,982
1,775,910	56,690	70,163	200	2,299	788	56	235	3,378	1,832,600	1,832,600		
2,983,414	556,979	100,645	170	4,090	1,465	122	460	6,137	3,347,830	3,308,414	185,997	45,982

Counties—Fifth District—1910.

Disposit Output-	tion of Tons.	for blasting coal.	1.		Em	ploy	és.			Blasting Coal.						
Loaded on cars for shipment.	Other purposes.	Kegs of powder for blas	Days of active operation.	Miners.	others.	Boys.	All above ground.	Total.	Tons mined—By hand.	From solid-Tons.	Undercut-Tons,	Both methods—Tons.				
	24,611	274	150	7	3		2	12	24,611							
	371	12	60	3			1	4	371							
	10,526		287	47			8	55	10,526							
	200,867	5,886	215	191	31	4	36	262	200,867							
	236,375	6,172	218	248	34	4	47	333	236,375							
2,983,414	793,354	106,817	197	4,338	1,499	126	507	6,470	3,584,205	3,308,414	185,997	45,982				

All Mines—Recapitulation by

			Productio	n of Differ	ent Grades	in Tons.			-A11
Counties.	Number of mines.	Mine run.	Lump.	Egg.	Nut.	Pea,	Slack.	Total.	Average value per ton—All grades.
Christian	9	242,559	603,065	2,145	58,146	359,380	52,192	1,317,487	\$.979
Edgar	1	371						371	1.50
Macon	5	56,678	127,714	23,861	7,202	38,311	11,764	265,530	1.596
Moultrie	1	5,520						5,520	1.50
Shelby	6	11,782	61,194	28,927	18,783	28,130	5,577	154,393	1.317
Vermilion	38	1,480,160	316,343	200	43,936	183,514	9,314	2,033,467	.991
Total	60	1,797,070	1,108,316	55,133	128,067	609,335	78,847	3,776,768	\$1.043

Counties—Fifth District—1910.

	Disposition of Output—Tons.				Emj	ployé	s.			В	lasting Coa	1.
Loaded on cars for shipment.	Other purposes.	Kegs of powder for blasting coal	Days of active operation.	Miners.	Others.	Others. Boys. All above ground. Total. Tous mined—By hand			From solid—Tons.	Undercut—Tous.	Both methods—Tons.	
964,808	352,671	23,989	147	1,222	463	46	151	1,882	1,137,010	1,112,399	180,477	
	371	12	60	3			1	4	371			
114,211	151,319	2,916	168	377	128	14	33	552	265,530	265,530		
2,045	3,475	50	92	16	3		15	34			5,520	
126,440	27,953	3,801	237	230	86	6	36	358	147,827	97,885		45,982
1,775,910	257,557	76,049	211	2,490	819	60	271	3,640	2,033,467	1,832,600		
2,983,414	793,354	106,817	197	4,338	1,499	126	507	6,470	3,584,205	3,308,414	185,997	45,982

SIXTH INSPECTION DISTRICT-1910.

FIFTH ANNUAL REPORT.

Counties—Calhoun, Greene, Jersey, Macoupin, Montgomery.

JAMES TAYLOR, Inspector, Peoria.

Hon. David Ross, Secretary State Bureau of Labor Statistics, Springfield:

SIR—I have the honor in compliance with section 12 of an Act of the General Assembly of Illinois, of submitting the fifth annual report of the coal mines in operation, also those having been abandoned in the sixth inspection district as now formed, comprising the counties of Calhoun, Greene, Jersey, Macoupin and Montgomery.

This report contains information regarding the number of coal mines in the number of mines that have been abandoned during the year; the number of mules, and electric motors used in the transportation of coal underground; the number of mining machines employed in undercutting the coal; the number of men employed underground and on the surface who are engaged in the coal mining industry in this district; the number of kegs of powder consumed in blasting coal and other mining operations; the number of toos of coal of the various grades that have been produced during the year; the number of fatal and non-fatal accidents that have occurred during the year besides other items of interest pertaining to the coal mining industry in this district.

The following is a summary of the more important items contained in this

Number of mines 37 Number of new mines 1 Number of abandoned mines 27 Number of local mines 27 Number of local mines 27 Number of local mines 82 Tons of nine run 822,470 Tons of lump 3,226,308 Tons of egg 264,149 Tons of pea or screenings 1,372,370 Tons of slack 31,238 Aggregate value of total product 55,407,164	port.
Number of abandoned mines 1 Number of shipping mines 27 Number of local mines 27 Total tons of coal produced, all grades 5,862,508 Tons of mine run 832,470 Tons of lump 3,226,308 Tons of egg 264,149 Tons of pea or screenings 13,722,370 Tons of slack 91,288 Aggregate value of total product \$5,407,104	
Number of shipping mines 27 Number of local mines 10 Total tons of coal produced, all grades 5,82,508 Tons of nine run 832,470 Tons of lump 3,226,308 Tons of egg 264,149 Tons of nut 75,923 Tons of pea or screenings 13,72,370 Tons of slack 91,288 Aggregate value of total product \$5,407,104	Imper of abandoned mines
Number of local mines 10 Total tons of coal produced, all grades 5,882,508 Tons of mine run 832,470 Tons of lump 3,226,308 Tons of egg 284,149 Tons of nut 75,923 Tons of pea or screenings 13,722,370 Tons of slack 91,288 Aggregate value of total product \$5,407,104	
Total tons of coal produced, all grades 5,862,508	
Tons of mine run 382,470 Tons of lump 3226,308 Tons of egg 264,149 Tons of nut 75,923 Tons of pea or screenings 12,123,70 Tons of slack 91,288 Aggregate value of total product \$5,407,104	
Tons of lump 3.226,308 Tons of egg 264,149 Tons of nut 75,923 Tons of pea or screenings 1372,370 Tons of slack 91,288 Aggregate value of total product 35,471,104	
Tons of egg 284 149 Tons of nut 75,923 Tons of pea or screenings 1,372,370 Tons of slack 91,288 Aggregate value of total product \$5,407,104	
Tons of nut 75,923 Tons of pea or screenings 1372,370 Tons of pea or screenings 1,372,370 Tons of slack 91,288 48gregate value of total product 35,407,104 1,008,000	
Tons of pea or screenings 1,372,370 Tons of slack 91,288 Aggregate value of total product \$5,407,104	ns of nut
Aggregate value of total product	ns of pea or screenings
Aggregate value of total product	
	gregate value of total product
	ns loaded on cars at mine for shipment
Tons supplied to locomotives at the mines	
Tons sold to local trade	
Tons consumed or wasted at mines	ns consumed or wasted at mines
Number of miners employed	
Number of others underground	
Number of boys above ground	
Number of others above ground 576	
Number of fatal accidents 6	

Number of non-fatal accidents	35
Number of tons mined to each fatal accident	977,085
Number of tons mined to each non-fatal accident	167,500
Ratio of men killed to each 1.000 employed	0.8
Tons of coal mined by hand	1,534,339
Tons mined by machine	4,328,169
Number of machines in use	319
Number of kegs of powder used in blasting coal	88,390
Number used for other purposes	
Number of motors in use	23

OUTPUT OF COUNTIES.

The shipping mines of the district have been idle during the months of April, May and June on account of the strike.

A comparative showing is presented of the output of coal in each county for the years 1909 and 1910, with the increase and decrease as follows:

Counties.	Total Product of Co		Increase.	Decrease.
	1909.	1910.		
Calhoun.	4,330	4,660	330	
Green	12,160	5,420		6,740
Jersey	400			400
Macoupin	4,361,390	4,039.702		321.688
Montgomery	1,480,635	1,740,431	259.797	
Total	5,858,915	5,790,213	260.126	328,828
Net decrease				68,70

IMPROVEMENTS.

The Superior Coal Company, Gillespie, Macoupin county, has made very exreme improvements in its number 1, 2 and 3 mines. Installing electric locomotives, to replace air locomotives in mine number 1; increasing the number of electric motors in mines numbers 2 and 3; repairing the passageways to the escapement shafts, also providing at each mine two "Peerless Automatic Head Protectors" for rescue work and for fighting fire.

The Madison Coal Corporation has installed electric haulage in its number 5 mine at Mt. Olive and has made several extreme improvements in the underground arrangement; the entry has been cleaned up leading to the consolidated coal company's mine and is now using it for an escapement shaft, this mine now has three means of egress, a portion of the hoisting shaft has been retimbered.

The Consolidated Coal Company has placed a new overcast and undercast in its number 14 and 15 mines and are reconstructing the head frame of number 14 at Staunton.

The Girard Collieries Company has installed a 150 K. W. dynamo, a 150 H. P. boiler, 62 inches by 16 feet, and a ten ton electric locomotive. The company has made many improvements underground such as closing off old works thereby securing better ventilation. The main entry of this mine has been relaid with forty pound rails, and much of the dust has been removed from this entry. Refuge places have been placed at lawful distances both on the main and cross entries.

The Royal Colliery Company has made marked improvements in the methods of ventilating the working of its mines. Three new ropes have been put on the drum and two new sheave wheels on top of the head frame.

The Vivian Collieries Company has greatly increased the efficiency of the engines at its mine, by constructing a partition wall between the hoisting engine, and the electric machinery,

The Glenridge Coal Company is now making extensive improvements in

the escapement shaft of its mine in the passageway thereto.

The Litchfield Coal Company has retimbered a portion of the hoisting and escapement shaft of its mine, repaired the cages, and retimbered the bottom of the hoisting shaft. Much improvement has been made in the ventilation of this mine by cleaning out the airway to fan shaft and reframing the fan.

The Montgomery County Coal Company has installed two ten ton electric motors, which will enable the handling of a large output; the ventilation has been greatly improved by a change of the system of firing the shot. It had been customary for the miners to fire shots whenever they got a shot ready, under such a system the mine was constantly smoky at the working face of the return airways. Some difficulty was encountered in securing the change to the firing of shots once a day, but now that it is secured everybody working in the mine is better satisfied.

I desire to call special attention to the improvement of the escapement shafts of the Hillsboro Coal Company's mine, also that of the Burnwell Coal Company No. 24 mine; both escapement shafts of these mines were equipped with small cages and geared engine. After making a trial test of the length of time it would take to hoist all the men from the mines by way of the escapement shaft, it was found advisable to secure some better arrangement with which to get the men more promptly out. After recommending an iron latticed stairway, the Hillsboro Company had one built by the Litchfield Foundry Company and installed in their escapement shaft which is 400 feet in depth. The mining engineer of the Burnwell Coal Company made an inspection of this iron stairway, and at once ordered a similar stairway to be installed at their No. 24 mine located at Witt; both companies are well pleased with the change.

The Shoal Creek Coal Company at Panama has installed a pair of first motion hoisting engines, and two new boilers at its No. 1 mine. This company is contemplating sinking a new shaft in the center of its 17,000 acres coal right; but have been waiting for the opinion of the State Inspector as to what constituted a fire proof shaft. This mine is now what is known as a machine mine.

BENEFIT OF AN AUXILIARY FAN IN COAL MINES.

On one of my inspection visits to the mine of the Hillsboro Coal Company located at Hillsboro, the ventilation was so poor and charged with C O blackdamp, in the No. 7 and 8 east entries, and their sub-entries, that it became necessary to remove the men from that section of the mine until such times , as the ventilation was improved.

At this examination of the mine, by careful measurement, I could only get 10,260 cubic feet of air per minute at a distance of about 4,000 feet from the main ventilating fan, and 2,200 feet from the working face of the two -7 and 8 east entries. The air current in the return airway of No. 7 entry was charged with C O'z blackdamp which came from the abandoned portion of that section of the mine.

After careful consideration Mr. Smith, the mine manager, concluded to install an auxiliary fan. Electric power being available near to where he

desired to locate the fan.

For this experiment a 4 foot diameter fan was built, with blades 16 by 22 inches; the fan enclosed with a spiral casing having an outlet of 24 inches. The motor supplying the power is a 5 H. P. electric and runs at 300 revolutions per minute, having belt connections with the fan which makes about 400 revolutions per minute.

After the fan had been started and in operation for a few hours, the black damp, or C O'z was removing from the old workings; this continued for sometime and on the following day the men that had been removed from the mine were able to return to their working places. On my next visit a few days after the auxiliary fan had been installed, I was pleased to find a large increase, and improvement in the ventilation throughout the mine. The air was again measured and found to be 17,360 cubic feet per minute, there was also an increase in the subentries of 5,310 cubic feet per minute in each entry. There was no trace of C O'z blackdamp found in any portion of the mine. I have had no opportunity since my last visit to make a further test of this auxiliary fan, owing to the mine being idle on account of the strike, but I expect to make an exhaustive investigation of the results obtained.

I congratulated Mr. Smith on the results already secured, and the manner in which he had installed this auxiliary fan.

MINING LAWS PRINTED IN FOREIGN LANGUAGES.

The greatest number of accidents in coal mines occur singly, and should teach us the importance of individual effort in preventing and reducing their numbers.

The increase in the number of non-English speaking miners, renders a close oversight over these workmen imperative; they should receive such instructions and training as would enable them to take care of themselves and those with whom they are working.

When we take into consideration that the majority of the men now mining coal in this State, are unable to speak the English language, we shall better understand the importance of educating and training of this foreign element, who are not only foreign to our language, but are entirely foreign to any knowledge of our methods of coal mining.

I would suggest that a set of questions be arranged, with answers, in the various languages and given to each foreign miner working in or about our coal mines; and he should not be allowed to work alone in a coal mine until such time when he is able to speak and understand the following English words, and phrases: Want props; way to escape shaft; way to hoisting shaft; air-course; close the door; fire, bad roof; set a prop; look out; roof falling; keg of powder; explosion; gas, danger, keep out; have no light on head when handling powder; get on the cage; get off the cage. They should also be thoroughly instructed in the State code of signals, and how to reclamp the hole in the powder keg after each charge is taken out. The Slav, Pole, Uun or Italian is not willfully more careless than the American speaking miner, but he is inexperienced and ignorant of our language, hence the necessity of his being taught the meaning of such words and phrases as have been mentioned, before he is permitted to work by himself in or around a coal mine. He should also be required to work with a foreign, American speaking miner, until such time that he is competent to understand and speak the foregoing English words. The mining law should be printed in the principle foreign languages parallel with the English language.

REGULATION OF ELECTRICAL MINING.

The increase in the number and use of electric mining machines and motors has been noticed during the last few years, and nowhere more marked than in connection with coal mines of this State.

The electric mine locomotive has done for underground haulage what the trolley car has done for the surface. It has come to stay with us and must be taken into account in the product of our mines. Up to this time we have no legislation in Illinois regulating the installation of electric machinery in coal mines. No one can deny that there is danger connected with the use of electric power in and about mines yet there has been no law enacted along these lines.

In compliance with section 12, paragraph (i) of the the general mining laws, I would recommend the passing of an act regulating the installation of electric machinery in and about coal mines and establishing a standard method and practice in installing electric machinery in mines.

FIRST AID WORK IN CASE OF ACCIDENTS.

I am desirous of seeing at each mine in this district, the establishing of first aid companies, or squads; the results of first aid work in case of accidents cannot be too highly commended, it not only trains men, immediately available for rescue work at time of an accident, but prompt treatment given the injured prevents unnecessary suffering.

The importance of this work should be recognized by all operators of shipping mines not only of this district but of the State and I hope that they will take the matter under advisement; and if any coal company or set of miners desire to establish a first aid squad and will let me know, I shall be glad to help, and do all in my power in teaching such a squad how best to

perform this humanitarian work at our coal mines.

I would appeal for volunteers from each mine in my district to form a first aid squad, the work must be entirely voluntary, and no pecuniary inducements of any sort are to be considered. I will endeavor to prevail on the coal companies to furnish all equipment necessary so that men volunteering for this work will be put to no personal expense; however, I desire that every man shall feel that he is doing philanthropic work and may thereby possibly save the life of many badly injured miners and be the means of placing them in the hands of a surgeon in a much better condition than would be possible without the first aid work.

In case of accident the essential points are—a knowledge of what to do; promptness; self-possession and perseverance. Who will make the first call? What coal company will be the first to provide one or more cars for no other purpose than to be used in conveying injured persons in your mine to the surface. They should be long, low, and wide without ends, having a spring mattress to support the stretchers. Such a car will save many a miners life.

FATAL ACCIDENTS.

August 14, 1909, Herman Newbaum, machine helper, age 30 years, married, was killed by a fall of slab while the machine runner was undercutting the coal at the face of his working place in shaft No. 1 of the Shoal Creek Coal Company, Panama, Montgomery county. This room had a foot of slate, following each cut, that stuck to the roof after the coal had been shot down; this slate was shot down by the miners after the coal had been loaded out. In this case a piece of slate hanging over the face of coal fell with the above result. The deceased was a German, and leaves a widow and one child.

January 4, 1910, John Proberts, driver, age 19 years, single, was severely injured by a kick from a mule that he was driving in mine No. 3 of the Superior Coal Company, Gillesple, Macoupin county. He was taken to his

home when he died from the injuries the following day.

February 7, 1910, Dan Waters, driver, age 34 years, single, was injured by loaded mine cars while driving a mule in No. 1 shaft of the Superior Coal Company, Macoupin county. He was found partly under the first car of the trip which he was taking to the bottom of the shaft. He died immediately.

March 11, 1910, James Reeves, miner, age 67 years, married, was killed by a fall of slate from the roof in the mine of the Litchfield Coal Company, Litchfield, Montgomery county, while loading a car of coal. The deceased and his partner had placed a prop to support the loose slate while they cleaned up the track, on which coal had been thrown by a shot fired the previous night; while cleaning up the roadway they pushed their car towards the face and according to the statement of his partner they intended to place more props as soon as they had got their car to the face. Deceased leaves a wife and four grown sons.

March 29, 1910, Battsha Deparil, machine runner, age 40 years, married, was instantly killed by a fall of coal at the face of his room; he was undercutting in No. 1 mine of the Shoal Creek Coal Company, Panama, Montgomery county. Deceased leaves a wife and four children.

June 4, 1910, George Archibald, trip rider, aged 20 years, single, employed in the No. 1 mine of the Superior Coal Company, Gillespie, Macoupin county, was injured by being run over by two empty cars. He died the same day.

The tables of the fatal and non-fatal accidents follow, together with the tables of each county showing the output of coal for the year 1910.

Respectfully submitted,

JAMES TAYLOR,
State Inspector of Mines, Sixth District, Peoria.

Fatal Casualties—Sixth District—July 1, 1910.

Date.	Name.	Age.	Occupation.	Residence. (Town.)	Married.	Single.	Widows.	Children.	Dependents.	Cause of Accident.
1910 Jan. 4 Feb. 7 Mar. 11 29	John Proberts Daniel Waters James Reeves Battsta Deparil	19 34 67 40 20	Driver	Gillespie	 I 1	1 1 1	 1 1 	4 4	1 5	Falling slate

Recapitulation of Fatal Casualties—Sixth District—1910.

Residence.	No.	Occupation.	No.	Cause of Accident.	No.	Colliery.	No.
Gillespie Litchfield Panama	1 2	Drivers	1 1 1	Falling coal Falling roof. Falling slate. Mule, kicked by Pit cars	1	Litchfield . Shoal Creek . Superior .	1 2 3
Total	6		6		6		6

Non-Fatal Casualties—Sixth District—July 1, 1910.

Date.	Name.	Age.	Residence. (Town.)	Married.	Single.	Children.	Dependents.	Character of Injury and Cause of Accident.	Time lost—days.
Aug. 6 9 11 Sept. 20 Oct. 5 7 10 12 12 12 15 29 29 29	Alex. Cheski Shelton Taylor Pearl Cushman Joe Klazi M. Roberts Pete Fallerins Andy Schouler Thos. Granger Geo. Dobrabsky John Naimis Joe Gent James Ryan Warren Jones Frank Trionas Edward Adden Frank Dworseer Joe Herzog John Lynch Sweney Thinsen	34 44 32 36 21 34 27 35 49 22 25 42 30 39 18 48	Girard. Gillespie. do. Chicago Height. Mt Olive. Chicago Height. Mine No. 3. Sawyerville. Benld. do. do. Tollica Greenridge. Mt. Olive. do. Nokomis.	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	i i i i i i i i i i i i i i i i i i i	2 4 2 1 6	1 4 2 6 6 3 1 1 3 1 7 7 3 2	Foot injured, mule ran away. Leg broken, fell down. Foot injured, pit car. Body injured, falling coal. Head injured, falling coal. Head injured, falling coal. The state of the state of the foot injured. Leg injured, jumped from pit car. Leg injured, falling coal. Leg and foot injured, falling slate. Hip broken, pit car. Head injured, falling slate. Head injured, rage and rame. Face burned, bremen blast. Leg can boulder injured, fell off car. Fingers injured, repairing boilers. Wrist broken, pit car. Finger broken, falling coal.	34 113 76 195 35 39 89 88 35 110 41 90 195 102 90 34
Dec. 9 12 13 13 30 30 Jan. 6	A. J. Tucker. Antone Grillo. Robert Clevenger. Curt Zenner. Edward Bottcher. Louis Kortkamp. Frank Goodnick. Harry L. Dean.	49 20 19 47 55 29 27	Hillsboro	1 1 1 1 1 1	1		3 5 3	Leg broken, falling coal. Leg dislocated, falling coal. Collar bone broken, pit cars Body injured, falling slate Leg broken, falling coal. Leg broken, falling clod Leg injured, coal fell from car Body injured, falling slate	60 63 41 33 86 90 38 60
18 18 18 Mar. 12 15	Otto Bolino	27 34 60 35 28	BenlddoMt. OliveGirardHillsboro	1 1 1 1	1	3 1 2	4 1 2 3	Fingers cut with axe Eye injured, falling coal. Foot broken, falling slate Leg broken, decending cage Head and leg injured, falling coal. Leg cut off, pit cars.	40 35 80 60 60 *
18	William Ransdell Harrison Sawyer	48 21	do Staunton			51		Body injured, railroad cars Fingers mashed, stroke of ham- mer	50

^{*} Not recovered July 1, 1910.

• •	
Number of men injured.	
Number not recovered July 1, 1910	1
Number recovered July 1, 1910.	34
Total days lost by men recovered.	2,381
A way and time lost by man recovered	70

Recapitulation of Non-Fatal Casualties, Residence, Occupation, Cause of Accident and Colliery—Sixth District—1910.

Residence.	No.	Occupation.	No.	Cause of Accident.	No.	Colliery.	No
Benld Carlinville. Chicago Heights. Gillespie Girard. Greenridge. Hillsboro. Mt. Olive. Nokomis. Staunton. Sawyerville Toluca. Witt	1 3 5 2 1 3 7 2 1 1 1 1 1 3	Cager, top Company man. Drivers Laborers Loaders Machine run'r Miners Shoveler Timberman Top man. Trimmer.	1 10 2 7 3 7 1 1	Railroad cars Runaway mule	1 2 10 1 6 1 2 1 7 7 1 1	Burnwell Carlinville Consolidated Girard Kortkamp Madison Corp Peabody Superior Vivian	

Recapitulation of Non-Fatal Casualties, Nature of Injuries, Conjugal Relations and Time Lost—Sixth District—June 30, 1910.

Nature of Injuries.	ber,	ed.	ď	ren.	Dependents.	Time Los	st—Days.	Percent- age of	
·	Number	Married	Single.	Children	Depe	Total.	Average.	injuries.	
nkle injured	1	1				89	89	2.9	
ack injured	3	1 2 2	1	2	4	186	62	8.8	
odv injured	3	2	1	4	7	288	96	8.8	
oliar bone broken	1	1			1	41	41	2.9	
ye injured	1	1		3	4	35	35	2.9	
ace burned	1		1			102	102	2.9	
eet injured	2	2		3	4	110	55	5.8	
ingers broken	2 2	1	1	3	5	90	45	5.8	
ingers injured	2	1	1	1	2	145	72.5	5.8	
oot broken	2	1 3	1	13	16	119	59.5	5.8	
leads injured	3	3	*****	13	10	290 90	96.6 90.	8.8	
lip broken	6	6	1	13	17	499	83.2		
egs brokeneg cut off	0			13	17	499	80.2	17.6	
eg dislocated	1		1			63	63	2.9	
egs injured	4	4	1	9	8	202	50.5	11.3	
rist broken	1		1			32	32.	2.9	
Total	35	25	10	51	69	2,381	68.0	100.0	

Calhoun County-

			Ou	tput of 1	Mines in '	Γons.	total product.
Number.	Name of Operator.	Postoffice address of the mines.	Mine run.	Lump.	Other, grades.	Total.	Aggregate value o tota
1	LOCAL MINES. Calhoun Brick & Clay Co	Golden Eagle	4,620			4, 620	\$9,240

Mines in 1909, 1. Mines in 1910, 1.

Greene County-

_	À		Ou	tput of M	dines in '	Tons.	al product.
Number.	Name of Operator.	Postoffice address of the mines.	Mine run.	Lump.	Other grades.	Total.	Aggregate value of total product
1 2	LOCAL MINES. Kincaid & Mitchell. P. J. Tucker. Total—2 mines.	Greenfield Whitehall	200 460 660			4,200 460 4,660	\$8,324 800 \$9,124

Mines in 1909, 2. Mines in 1910, 2.

Sixth District—1910.

Disposit Outp	Disposition of Output.		n.	E	mploy	ēs.		Accio	lents.	solid or	Num of Anin Und	nals ler-	
Tons loaded on ears for shipment.	Other purposes.	Kegs of powder used for coal.	Days of active operation.	Average number of miners.	All other employés.	Total.	Tons mined by hand.	Killed.	Injured.	Blasting coal—From so undereut or both,	Horses.	Mules.	Numbe
	4,620		250	10	4	14	4,620						1

Sixth District—1910.

Disposit Outp	Disposition of Output.		n.	E	mploye	ēs.		Accie	lents.	solid or	Ani Un	nber of mals der-	
Tons loaded on cars for shipment.	Other purposes.	Kegs of powder used for blasting eoal.	Days of active operation.	Average number of miners.	All other employes.	Total.	Tons mined by hand.	Killed.	Injured.	Blasting coal—From so undercut or both.	Horses.	Mules.	Number.
	4, 200 460 4, 660	. 150	200 80 140	66 12	21	8 7	4, 200 460 4, 660						1 2

Jersey County-

			Ou	tput of 1	dines in '	Tons.	l product.
Number.	Name of Operator.	Postoffice address of the mines.	Mine run.	Lump.	Other grades.	Total,	Aggregate value of total product
1	LOCAL MINES. Cairus & Butts.	Brighton	800	800		1,600	\$2,800

Mines in 1909, 1. Mines in 1910, 1.

Sixth District—1910.

Disposit Outp	Disposition of Output.		tion.	Е	m ploy	és.	Ti.	Accio	lents.	solid or	Ani Un	mber of mals der- ind.	
Tons loaded on cars for shipment.	Other purposes.	Kegs of powder used coal.	Days of active operation	A verage number of miners.	All other employés.	Total.	Tons mined by hand	Killed.	Injured.	Blasting coal—From undercut or both.	Horses.	Mules.	Number.
	1,600		200	3	1	4	1,600						1

Macoupin County-

				Output of 1	fines in To	ns.	l product.
Number.	Name of Operator.	Postoffice address of the mines.	Mine run.	Lump.	Other grades.	Total.	Aggregate value of total product
2 3 4 5 6 7 8 9 10 11 12 13	SHIPFING MINES. Superior Coal Co., No. 3. Superior Coal Co., No. 2. Superior Coal Co., No. 1. Consolidated Coal Co., No. 15. Consolidated Coal Co., No. 14. Royal Colliery Co. Girard Colliery Co. Girard Colliery Co., No. 5. Vivian Colliery Co., Greenridge. Consolidated Coal Co., No. 5. Carlinville Coal Co. Lukins & Andrews, S. Mine. Gleuridge Coal Co., No. 1. Consolidated Coal Co., No. 6.	.dodo	9,630 23,779 14,100 30,385 16,050 29,666 28,510 26,879 6,000 50,965 5,152 4,189	542, 551 559, 840 438, 810 259, 614 198, 787 117, 284 87, 971 116, 410 35, 120 79, 529 26, 375 26, 000	23,573 12,684 20,440 12,274 3,299	693, 029 671, 484 545, 278 423, 287 374, 898 372, 674 257, 500 189, 996 137, 058 131, 612 65, 938 52, 440 50, 965 41, 272 14, 317	70,968 52,440 68,187 42,067 12,712
17 1 2 3	Nilwood Coal Co. Total. LOCAL MINES. Wm. Neil. Bawser—Truesdale. J. J. Harbaugh G. B. Loper Fritz Jarden.	Bunker Hill	191 200 100	2,512,031 4,000 2,726 1,296	1,268,541 913 1,393	4,913 4,310 1,296 200 100	\$7,913 6,444 2,268 350 150
	Total		249 525	2 520 053			\$17,125 \$3 512 111

Mines in 1909, 22. New mines, 1. Abandoned mines, 1. Mines in 1910, 22.

Sixth District—1910.

Disposit Outp	ion of ut.	for blasting	ion.	Eı	m ployé	ės.		Aceid	lents.	solid or	Ani	nber of mals der-	
Tons loaded on cars for shipment.	Other purposes.	Kegs of powder used for blasting coal.	Days of active operation.	Average number of miners.	All other employés.	Total.	Tons mined by hand.	Killed.	Injured.	Blasting coal—From solid or undercut or both.	Horses.	Mules.	Number.
676, 028 654, 482 528, 277 375, 864 334, 172 246, 794 166, 670 133, 142 119, 134 45, 866 39, 440 48, 233 37, 182 1, 974 5, 505 800	17,001 17,002 17,002 17,001 47,423 40,726 32,282 10,706 23,326 3,916 12,478 20,072 13,000 2,682 4,090 12,343 1,308 700	4,066 3,591 3,579 2,380 2,416 19,334 12,032 1,051 4,920 5,599 3,448 2,500 1,898 313 76 6 76 9	210 212 204 196 184 191 205 173 148 135 187 259 64 4130 12 13 35	300 254 150 75 52 123 8 962	567 545 551 465 355 100 60 270 74 233 39 78 166 93 241 137 2	567 545 551 400 3144 270 224 233 114 130 289 93 241 117 10	372,674 257,500 65,938 52,440 38,374			dododododododo			1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17
3,753,550	4,913 4,310 1,296 200 100 10,819 286,875	60 118 5 183 62, 495	210 253 200 100 45 162	8 4 7 2 2 2 2 3	2 4 1 7 3,923	10 8 8 2 2 2 30 4,908	4,310 1,296 200 100 10,819		27				1 2 3 4 5

Montgomery County --

			Ou	tput of M	lines in T	l'ons.	I product.
Number.	Name of Operator.	Postoffice address of the mines.	Mine run.	Lump.	Other grades.	Total.	Aggregate value of total product.
	SHIPPING MINES. Shoal Creek Coal Co., No. 1. Hillsboro Coal Co. Burnwell Coal Co., No. 24. Kortkamp Coal Co., Kortkamp. Burnwell Coal Co., No. 22. Montgomery County C. Co., No. 1. Clover Leaf C. M. Co., No. 2. Peabody Coal Co., Nokomis.			109,804 100,733 67,155	11,870 40,373	429, 270 245, 780 226, 282 214, 993 204, 377	245,780 214,967 247,242 194,158
7 8 9 10	Montgomery County C. Co., No. 1. Clover Leaf C. M. Co., No. 2. Peabody Coal Co., Nokomis. Farmersville Coal Mining Co. Litchfield Coal Co., No. 7.	Litchfield	3,305	72, 476 31, 886 23, 383 18, 832	49,043 27,233 15,650 13,963	36,090	124,788 98,004 53,738 49,376
1	LOCAL MINES. Raymond Coal Co Total.					6,520 6,520	
	Total—11 mines.						\$1,873,829

Mines in 1909, 11. Mines in 1910, 11

Sixth District—1910.

ion of ut.	or blasti	peration.	Е:	mploye	is.		Accid	lents.	olid or	Anii Un	mals de r-	
Other purposes.	Kegs of powder used f	Days of active operation	Average number of miners.	All other employés.	Total.	Tons mined by hand.	Killed.	Injured.	Blasting coal—From sundercut or both.	Horses.	Mules.	Number.
113, 439 14, 011 10, 690 4, 444 4,586 5, 603 7, 895 5, 390 5, 838 16, 002 187, 898	6, 645 1, 851 1, 737 1, 622 1, 812 1, 773 5, 296 884 2, 505 1, 590 25, 715	222 202 153 212 150 206 154 166 173 191	52 240 220 145 28 42 47 774	381 228 75 206 70 200 72 104 31 50	433 228 315 206 290 200 217 132 73 97 2,191	226, 282 204, 377 125, 164 29, 645		1 3 2	Both U. C Solid U. C Solid U. C Solid Both Solid do			1 2 3 4 5 6 7 8 9
6,520 6,520		200	12	2	14							1
	113, 439 14, 011 10, 690 4, 444 4, 586 5, 603 7, 895 5, 338 16, 520	113, 439	113, 439	113,439	113,439 6.645 222 52 381 14,011 1.851 202 22 28 14,011 1.851 202 22 28 14,444 1,622 212 20 70 1,560 1.732 153 240 75 1,560 1.733 206 20 70 1,7836 5.894 156 145 70 1,589 2,505 173 42 31 16,002 1,590 191 47 50 187,898 25,715 183 774 1,417	113, 439	113, 439	113, 439	113, 439	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	113,439

Shipping Mines-Recapitulation by

Counties. Macoupin			Productio	n of Differ	ent Grade	s in Tons.			-all
Counties.	Number of mines.	Mine run.	Lump.	Egg.	Nut.	Pea.	Slack.	Total.	Average value per ton- grades.
Macoupin	17	249, 034	2,512,031	155, 298	25, 617	1,056,289	31,337	4,029,606	\$0.843
Montgomery	10	570,345	701, 455	108,851	50,306	313,775	59,951	1,804,683	1.03
Total	27	819,379	3, 213, 486	264, 149	75,923	1,370,064	91, 288	5, 834, 289	\$0.918

Local Mines-Recapitulation by

Counties.	Number of mines.	Mine run.	Productio	n of Differ	rent Grade	es in Tons.	Slack.	Total.	Average value per ton-all grades.
Calhoun	. 1	4,620						4,620	80.200
Green	2	660	4,000					4,660	1.957
Jersey	1	800	800					1,600	1.75
Macoupin	5	491	8,022			2,306		10,819	1.582
Montgomery	1	6, 520						6,520	2.25
Total	10	13,091	12,822			2,306		28, 219	\$1.877
The State	37	832, 470	3, 226, 308	264, 149	75,923	1,372,370	91, 288	5,862,508	\$0.922

Whole number of mines reported for 1909, 37. Number of mines opened during the year, 1. Number of mines sbandoned during the year, 1. Whole number of mines reported for 1910, 37.

Counties—Sixth District—1910.

Disposit Output-	Disposition of Output—Tons.				Em	ploy	es.			В	lasting Coa	1.
Loaded on cars for shipment,	Other purposes.	Kegs of powder for b coal.	Days of active operation	Miners.	Others.	Boys.	All above ground.	Total.	Tons mined—By hand.	From solid-Tons.	Undercut-Tons.	Both methods—Tons.
3,753,550	276,056	62,312	187	962	3,432	101	383	4,878	788, 426	750,042	3,228,599	50,965
1,616,785	187,898	25,715	183	774	1,165	66	186	2,191	717,694	643,337	634,072	527, 274
5,370,335	463,954	88,027	185	1,736	4,597	167	569	7,069	1,506,120	1,393,389	3,862,661	578, 239

Counties—Sixth District—1910.

Disposit Output-	Disposition of Output—Tons.		ū.		Em	ploy	és.			В	lasting Coa	1.
Loaded on cars for shipment.	Other purposes.	Kegs of powder for blasting coal.	Days of active operation.	Miners.		T		Total.	Tons mined—By hand.	From solid—Tons.	Undercut—Tons.	Both mehtods-Tons.
	4,620		250	10			4	14	4,620			
	4,660	180	140	12			3	15	4,660			
	1,600		200	3			1	4	1,600			
	10,819	183	162	23			7	30	10,819			
	6,520		200	12			2	14	6,520			
	28,219	363	174	60			17	77	28, 219			
5,370,335	492, 173	88,390	182	1,796	4,597	167	586	7,146	1,534,339	1,393,389	3,862,671	578, 239

All Mines-Recapitulation by

			Productio	n of Differ	ent Grade	s in Tons.			-all
Counties.	Number of mines.	Mine run.	Lump.	Egg.	Nut.	Pea.	Slack.	Total.	Average value per ton-all grades.
Calhoun	1	4,620						4,620	\$.200
Green	2	660	4,000					4,660	1.957
Jersey	1	. 800	800					1,600	1.75
Macoupin	22	249,525	2,520,053	155, 298	25,617	1,058,595	31,337	4,040,425	.869
Montgomery	11	567,865	701, 455	108,851	50,306	313,775	59,951	1,811,203	1.035
Total	37	832, 470	3, 226, 308	264, 149	75,923	1,372,370	91, 288	5,862,508	\$ -922

Counties—Sixth District—1910.

						_						
Disposit Output-	tion of Tons.	blasting	of active operation.		Em	ploy	és.			В	lasting Coa	il.
Loaded on cars for for shipment.	for				Underground Others.			Total.	Tons mined—By hand.	From solid—Tons.	Undercut—Tons.	Both methods—Tons.
,	4,620		250	10			4	14	4,620			
	4,660	180	140	12			3	15	4,660			
	1,600		200	3			1	4	1,600			
3,753,550	286, 375	62, 495	180	985	3,432	101	390	4,908	799, 245	750,042	3, 228, 599	50,965
1,616,785	194,418	25,715	184	786	1,165	66	188	2,205	724, 214	643, 337	634,072	527, 274
5,370,335	492, 173	88,390	182	1,796	4,597	167	586	7,146	1,534,339	1,393,379	3,862,671	578, 239

SEVENTH INSPECTION DISTRICT-1910.

FIFTH ANNUAL REPORT.

Counties-Bond, Clinton, Madison, Marion, Washington.

W. W. WILLIAMS, Inspector, Litchfield.

Hon. David Ross, Secretary State Bureau of Labor Statistics, Springfield:

Sir—Complying with the provisions of the law of our State defining the duties of the State Inspectors of coal mines, I have the honor to submit herewith the fifth annual report of the coal mines in the seventh inspection district now comprising the counties of Bond, Clinton, Madison, Marion and Washington. The accompanying schedules give the number of mines in operation, tons mined, number of men employed and other details of the counties now comprising this district.

The most important items summarized from the reports of the operators in the several counties are set forth in the following statements:

· · · · · · · · · · · · · · · · · · ·	
Number of counties	9
Number of mines	44
Number of closed or abandoned mines	6
	28
Number of shipping mines	16
Number of local mines	
Total tons, all grades of coal	5,913,722
Tons of mine run	714,778
Tons of lump	2,849,365
Tons of egg	411,748
Tons of nut	236,592
Tons of pea or screenings	
Tons of slack or waste	441,646
Aggregate value, total product	\$5,375,386
Tons loaded on cars for shipment	5,294,642
Supplied to locomotives	181,034
Sold to local trade	213,213
Consumed and wasted at the mines	224,833
Days of active operation, shipping mines	188
	2,293,065
Tons mined by hand	
Tons mined by machine	3,620,657
Number of miners	2,667
Other employes underground	3,976
Employes above ground	604
Total number of employés	7,247
Kegs of powder used blasting coal	111,252
Number of fatal accidents	23
	105
Number of non-fatal accidents	329
Number of employes to each fatal accident	
Number of tons of coal to each fatal accident	268,895
Number of employes to each non-fatal accident	69
Number of tons of coal to each non-fatal accident	57,977
Ratio of fatal accidents per 1,000 persons employed	3.0
Transfer of the control of the persons of the persons of the control of the contr	0.0

OUTPUT BY COUNTIES.

The following is a comparative statement of the output of the counties of the district for the years 1909 and 1910, showing the increase and decrease in tonnage:

Counties.	Total produ all gr	act in tons, ades.	Increase.	Decrease.
	1909.	1910.		
Bond	93,095	103,537	10,442	
Clinton	1,051,108	1,000,935		50,17
Madison	3,287,418	3,719,155	431,737	
Marion	1,096,847	1,065,268		31,57
Washington	48,116	24,827		23,28
Total	5,576,584	5,913,722	442,179	105,04
Net increase			337,138	

This shows a net increase of 337,138 tons, which is mainly owing to the large increase in the output of Madison county.

ABANDONED MINES.

While no new mines have been opened in any of the counties in the district during the year there were six mines abandoned, one in Bond county, three in Clinton and two in Madison. There has been extensive improvements made at some of the mines in operation.

IMPROVEMENTS.

Some extensive improvements have been made at several of the mines now in operation.

The New-Staunton Coal Company at Livingston, Madison county, has erected a Briquette plant for briquetting its fine coal. This plant has a capacity of 250 tons a day of eight hours. The company has installed two new boilers 18 feet by 72 inches, with flues, and has also put in a new shaker screen covering four tracks.

The Madison Coal Company, at its Nos. 2 and 4 mines, situated at Glen Carbon, Madison county, has made improvements at these plants, as follows: At the No. 2 mine they built an addition of brick 48 by 60 by 18 feet. This building is to be used as a generator and machine shop. There has been one new 150 K. W. generator of the Goodman type installed, connected to a 19 by 20-inch high speed engine; one 15 K. W. Western Electric generator, connected to the fan engine; two 150 H. P. boilers and two seven and one-half ton Goodman motors put into the mine for haulage. And at the No. 4 mine the company has built a brick addition 24 by 24 by 16 feet, to be used as a generator room. There has been installed two 150 H. P. boilers, one new 150 K. W. generator and one 15 K. W. generator; also two Goodman motors, the same as at the No. 2 mine.

The Pocahontas Mining Company at Pocahontas, at its No. 1 mine, Bond county, has erected a new Sullivan eight-foot fan, which will supply the mine with plenty of air for some time to come.

The Breese-Trenton Mining Company, at its Buxton mine at Bekemeyer, in Clinton county, has erected a twenty-foot fan.

The Lumaghi Coal Company has installed two Goodman motors in its $\mathrm{No.}\ 2$ mine at Collinsville and has also erected a new pit head at the same mine.

ABANDONED MINES.

The Illinois Collieries Company's mine at Sorento, Bond county, and the Consolidated Coal Company's mine at Breese, Clinton county, were not in operation during the year.

The Big Mound Coal Company's mine at New Douglass, Madison county, was closed last January by the inspector on account of having no escape-

ment shaft.

The Southern Coal & Mining Company has abandoned its No. 10 mine at Germantown, Clinton county.

CHANGE OF CORPORATE NAME.

The name of the Henrietta Coal Company of Edwardsville, Madison county, has been changed to the St. Louis and Illinois Coal Company.

FATAL ACCIDENTS.

The following is a detailed description of the fatal accidents that have occurred at the coal mines in this district during the past year:

July 28, 1909, Dave Miller, railroad car hauler, aged 22 years, single, employed at mine No. 2 of the Mt. Olive and Staunton Coal Company, Staunton, Madison county, was fatally injured while engaged with a team of horses hauling empty cars towards the tipple. For some reason the horses were frightened, and running dragged Miller between the team and the car, crushing him so that he died in a few hours. He was a single man, supporting his mother.

 $\bar{\rm July}$ 30, 1909, Tony Kukovich, driver, aged 20 years, single, employed in the No. 1 mine of the New Staunton Coal Company, Mt. Olive, Madison county, was run over by a loaded trip of cars, breaking his back and lacerating his

scalp. He died August 27, 1909.

August 21, 1909, Anton Kovice, loader, aged 30 years, married, employed at the DeCamp Coal Company's mine at Worden, Madison county. Deceased was engaged in loading coal in the mine and was caught under falling clod at the face of his room, breaking his back and both legs, dying after the accident. He leaves a widow and three children.

August 27, 1909, Albert Detering, car puller, aged 26 years, employed at mine No. 2 of the Donk Bros.' Coal Company, Pleasant Ridge, Madison county, was killed by being drawn into the ventilating fan. It seems that he was helping Mr. Hanvey, who was killed at the same time and in the same manner. They were both engaged, it is supposed, in repairing the fan, and were likely trying to get it off the center, when it was moved far enough to take steam. It started, suddenly, drawing both men into the center of the fan. Detering was blown off the end of the blades through the casing, and nearly into the escape shaft, and was killed instantly. Hanvey was revolved with the fan until it was stopped. He was alive when taken out, but died within a few minutes.

August 27, 1909, William Hanvey, mechanic, aged 50 years, employed at Donk Bros.' Coal Company mine No. 2, Maryville, Madison county, was killed by the same accident with Mr. Detering, mentioned above. He leaves a

widow and eight children.

September 10, 1909, Frank Polzynsky, machine runner, aged 24 years, single, employed at the Mt. Olive & Staunton Coal Company's mine No. 2, Williamson, Madison county, was caught under a fall of coal at the face of his room. His helper had gone for some repairs for the machine and when he returned found Polzynsky dead under the coal.

December 27, 1909, Charles Carlson, shot firer, aged 39 years, married, employed at the Centralia Coal Company's mine No. 5, Centralia, Marion county, was killed in an explosion of gas, generated by the excessive use of blasting powder. He leaves a widow and two children. Three other men, all shot firers, were killed by the same explosion, namely, John Yonkus, aged 34 years, leaves a widow and five children; Alex Korzenewsky, aged 24 years, single; John Sveder, aged 26 years, single, supporting his mother.

January 8, 1910, Charles L. Brumworth, miner, aged 41 years, working at the Kerens-Donewald Ccal Company, Worden, Madison county, was killed by being caught between the walls of the shaft and the cage. He had just entered the mine a few minutes before the accident, but found he had left his pit cap on top. He then attempted to get on the cage after the signal had been given to hoist, and was told to keep back, but he did not heed the warning, and stepped on to the cage just as it started and was caught as above described. He leaves a widow and eight children.

January 8, 1910, Joseph Kaviathowskie, machine runner, aged 29 years, married, employed at the No. 1 mine of the New-Staunton Coal Company, Livingston, Madison county. Deceased was going home from his work, walking on the mine railroad tracks, and on the tracks where cars were

being switched at the time he was run down and killed.

January 13, 1910, William Futz, assistant mine manager, aged 48 years, married, employed at the mine of the Breese-Trenton Coal & Mining Company, Breese, Clinton county. Deceased attempted to cross the sump while the cage was descending. Before he could get across the cage caught him, crushing him between the bottom of the cage and the sump, breaking his back. He died February 27, leaving a widow and seven children.

January 18, 1910, Rudolph Hallenberg, miner, aged 32 years, single, employed at the New-Staunton Coal Company's mine No. 1, Livingston, Madison county. Deceased, after finishing his shift, was going into the wash room to wash and change his clothes; in doing so he fell or walked into a basin of hot water which was standing six feet to the left of the door. He was scalded from the waist down and died from the effects March 29.

January 22, 1910, Anton Melkush, driver, aged 19 years, single, employed at the No. 1 mine of the New-Staunton Coal Company's mine, Livingston, Madison county. Deceased was found dead under the first car of his loaded trip on the second north entry. It is supposed that he fell under the car and was killed instantly. No one witnessed the accident. He was the only support of a widowed mother.

January 27, 1910, Herman Grim, driver, aged 23 years, single, employed at mine No. 1 of the Donk Bros.' Coal & Coke Company, Donkville, Madison county. Grim, after completing his shift below, came to the top to send down a car of miner's tools. A young man, a visitor, was with him, and they both stepped off of the cage at the landing. Securing the car, they pushed it as they supposed on to the cage, but instead pushed it into the shaft, and both were drawn in with the cage and falling to the bottom, were killed. The engineer claims that he got a signal to return the cage. Deceased was the support of a widowed mother. The visitor mentioned was Edgar Belyou, aged 18 years, residence at Collinsville.

January 27, 1910, H. Retzlauff, driver, aged 22 years, single, employed at the No. 2 mine of the Donk Bros. Coal & Coke Company, Maryville, Madisson county, was bringing a car out of a room, riding on the front end. He was supposed to have fallen from the car, as other workmen heard him calling "whoa" to the mule. The car ran on to him, killing him instantly.

February 24, 1910, William Thorp, machine helper, aged 40 years, single, employed in the No. 3 mine of the Lumghi Coal Company, Collinsville, Madison county, was fatally injured under falling coal February 16, 1910, and died from its effect February 24. He was supporting his mother.

March 7, 1910, K. Galkus, machine helper, aged 32 years, single, employed at mine No. 1 of the New-Staunton Coal Company, was instantly killed under about four tons of coal and slate falling on him at the face of his room. He was undermining the coal at the time.

March 22, 1910, John S. Walker, miner, aged 50 years, widower, employed at the Co-operative Coal Company's mine at Breese, Clinton county, was killed instantly by falling rock. He was loading coal in a cross cut near the face of his room, when a very large piece of rock fell on him, with the result as stated. He leaves four children.

April 5, 1910, Perry Myers, miner, aged 55 years, married, working in his molocal mine No. 2, located at Bethalto, Madison county. He was at the time in the escape shaft inspecting the ladder and is supposed to have

fallen off and killed instantly.

The tables of fatal and non-fatal accidents follow, with the county tables, showing the output of each mine in this district for the past year.

Respectfully submitted,

W. W. Williams, Inspector Seventh District, Litchfield, Ill.

Fatal Casualties—Seventh District—July 1, 1910.

Date.	Name.	Age.	Occupation.	Residence. (Town.)	Married.	Single.	Widows.	Children.	Dependents.	Cause of Accident.
Aug. 21 27 Sept. 10 Dec. 27 27 27 1910 Jan. 8 8 13 18 22 27 Feb. 19	Anton Kovice Albert Detering Wm, Hanvey Frank Polzynsky Charles Carlson. John Yonkus. Alex Korzenewsky John Sveder. Chas. L. Brumworth J. Kaviatkowskie. Wm. Futze. Rudolph Hallenberg. Anton Melkush. H. Handlenberg. Anton Melkush. Wm. Tutze. Www. Tutze. Www. Www. Tutze. Www. Tut	30 26 50 24 39 34 24 26 41 29 48 32 21 40 32 50 55	Loader. Car puller Mechanic. Machine runner Shot firerdododododododod	Worden. Pleasant Ridge. Collinsville Staunton. Centralia do do do do Staunton. Carpenter. Livingston. Breese. Elivingston. Stauntville. Elwardsville. Glen Carbon Collinsville. Livingston. Bresse. Bethalto.	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	8 · · · · · · · · · · · · · · · · · · ·	9 3 6 1 9 1 8 	Railroad ears. *Pit ears. Falling clod Yventilating fan, found dead. Ventilating fan, found dead. Seas explosion do. do. do. do. do. do. do. do. falling dears. Seas explosion do. do. do. do. do. falling dears. Falling dears. Falling dears. Fell down shalt Fit ears. Fell down shalt Fit cars, fell under do. falling coal do. foll fladder in shaft.

Recapitulation of Fatal Casualties—Seventh District—1910.

Residence	No.	Occupation.	No.	Cause of Accident.	No.	Colliery.	No
Betholts. Breese. Carpenter Centralia Collinsville. Edwardsville. Glen Carbon. Livingston. Mt. Olive. Pleasant Ridge. Staunton. Worden.	2 1 4 2 1 1 1 3 1 1 3	Asst. manager. Car puller. Drivers Hauler railroad cars. Loader. Machine helper. Mach, runners. Mechanic. Miners. Shot firers.	1 5 1 1 1 3 1 4	Cages Falling clod Falling coal Falling rock Fan Fell down shaft Fell off ladder Gas explosion Hot water Pit cars Railroad cars.	1 3 1 2 1 1 4 1 4	Bresse-Trenton Centralia. Coöperation De Camp Donk Bros. Kerns & Donewald Lumaghi Madison Corp Meyer-Perry Mt. Olive New Staunton.	
Total	22		22		22		2

^{*} Died Aug. 27, 1910. † Found dead in ventilating fan. † Died Feb. 27, 1910. ** Died Mar. 29, 1910.

Non-Fatal Casualties—Seventh District—July 1, 1910.

Date	·-	Name.	Age.	Residence. (Town.)	Married	Single.	Children.	Dependents.	Character of Injury and Cause of Accident.	Time lost—days.
1909 May	19	Frank Stohl	30	Centralia		1			Legs broken, falling state	120
June	14	John Karbach	28	Breese	-;	1	;		Foot injured, pit car Hip injured, pit car Back injured, falling slate	120 34
July	2	Jesse Reed	35	Collinsville	1		1	2	Back injured, falling slate	33
٠	2	Louis Drenchpohl	31	Centralia	1		2	3	Leg broken, falling state	90 35
									Hand broken, track rail Side injured, falling of clod	37
	22	R. Evans	60	Troy	1		3	4	Leg and side injured, falling slate	39
	26	Anton Hubetz	46	Glen Carbon	1		1	2	Hips injured, pit cars Body injured, falling slate	34
Aug.	- 3	L. Stenatzki	29	Staunton	1 1				Foot injured, falling slate	31 60
	4	Jack Hoiher Geo. J Mitchell,	26	New Baden		1			Foot injured, pit car Finger broken, falling coal	30
	Ð	James Ossole I. M. Ferris	40	Cominsvine	1			1	Eye injured, flying coal Leg and foot injured, falling	40
	1				1	1		_	rock	30
	$\frac{20}{23}$	Charles Harter Joe Daukuts	26 34	Collinsville	li	1			Leg broken, falling coal Hand and wrist injured, pit car	° 90
04	26	Herman Schmidt	66	Breese			5	6	Hand injured, falling slate	30 103
sept.	4	Bailey Hite Mike Schubert M. Scudlore	20	Staunton	1.	i	1	2	Leg broken, falling slate Eye injured, flying steel Foot injured, pit car Hip injured and internally,	30
	16	M. Scudlore	41	Collinsville	1		6	7	Foot injured, pit car	30
	28	V. Spoettling		1		1		١ '	falling coal	54
	29	Wm. Harvey Ed. Lohsiner	29	Staunton Worden Livingston		1			Eye injured, flying coal. Ankle injured, foot cut, pit car Ribs and back injured, falling	50 40
Oct.	14	John Flurok	37	Livingston	i i	i	3	4	Ribs and back injured, falling	
		Fenotlo Odoni	1		1	1	1	1	Foot amputated, falling clod	120
	4	D. Castino Ed. Fox	40	Troy		î			Head and arm injured, pit car	30
	11	Ed. Fox Stanley Filor	32	Collinsville		1			Foot injured, pit car	44
			1		1	1			shaft	50
	11	George B. Mowen Hei Fvison	56	Breese			. 2	5	Body scalded, escaping steam Back and hip injured, falling	36
										60 119
	15	Glorak John Proposki Alvin Heinz John Vencie	32	do		i	4	5	Back injured, falling clod Leg injured, piece of iron Leg broken, falling clod	30
	15	Alvin Heinz	41	Collinsville	. :	١.;				113 45
	16	M. B. Harth Richard Harvel	56	Glen Carbon		ĺ			Ankle broken, falling coal Eye injured, flying point of	130
	19	Richard Harvel	34	Staunton	- -	١		1	pick	132
	20	Vanto Sandrio	18	Livingston		. 1			Wrist broken, pit car	78 35
	25	A. Hoak Chas. Kesckus	34	Worden	. 1	U.,	. 3		Finger mashed pit car wheel Leg broken, falling clod	158
	27	Chas. Kesckus A. Wilkins Chas. Taman	25	Murryville do	٠ -	. 1	٠		Body injured, falling coal Eye injured, firing shot	50 101
Nov.	1	Gus Schokoniki	30	do				. 2	Wrist injured, falling off pit	
		Frank DeKalb			1		١.	,	car Leg broken, falling part way	48
	-			-					down snart	107
	8	Jacob Rheg John Alex	43	Glen Carbon	: -				Ankle dislocated fell off machine	64 43
	11	Chas. Mitchell	25	New Baden	- -				Shoulder and face injured, pre- mature blast	30
	16	Geo. Sherman	. 50	Collinsville		1		. 1	Finger mashed, spragging pit	
					1					36 60
	22	Henry Bachman Anton Menia	4(New Baden Williamson		i	- 1	2	Finger cut off, cable broke	231
	23	Pete Holwich	. 52	Staunton					7 Hand and foot injured, falling slate	30
	23	Harry Cutchley	. 28	Glen Carbon	-	1 .	. :	3 4	Shoulder dislocated, falling	42
	27	Albert Trepi	. 19	Livingston			1		Foot injured, pit car	40
	28	Albert Trepi Chas. Rauch	. 40	Troy	-	1 .	-	2	Back and leg injured, falling	52
Dec.	2	S. Kalino Joseph Vaisins	. 2	Collinsville			1		Arm injured, pit car and rib Body burned, blast from next	45
	7	Joseph Vaisins	- 2	Centralia		-	1		Body burned, blast from next	107
	6	Herman Fake	. 5	New Baden	٠.		1		Ankles injured, falling coal	32

Non-Fatal Casualties—Sixth District—Concluded.

21 John Radko. 38 Staunton. 1 2 2 3 Hip dislocated and body bruised failing coal and soldy bruised failing sold and sold bruised failing sold and soldy bruised failing sold a	Date.	Name.	Age.	Residence. (Town.)	Married.	Single.	Children.	Dependents	Character of Injury and Cause of Accident.	Time lost-days.
21 John Radko	1969 Dec. 10	A. G. Douglas	35	New Baden,	1		-	4	slate	
28 R. Hatchitmer. 23 Maryville									Leg broken, slipped on track rail.	2
28 R. Hatchitmer 23 Maryville 1 Leg Droken, under pit car 28 Frank Heckman 25 Breese. 1 2 3 Leg broken, falling slate. 1910 10 10 10 10 10 10						ĺ		3	falling coal	
an. 9 Casper Hetflush. 25 Collinsville. 1 Collar bone broken, under pit car Nose broken, eye injured, falling rock. Head injured, cage bottom of shaft. Head injured, cage how on, falling clod. Arm broken, falling coal. Back broken, falling clod. Arm broken, falling clod. Arm broken, falling clod. Ar	28 28 28	Frank Heckman Horace Willey	25	Pocahontas	i	1	2		Head injured, kicked by mule Leg broken, falling slate	1
10 Herman Hoffman		Casper Hetflush	25	Collinsville	1			1		
1	10	Herman Hoffman	47	Glen Carbon		1			Nose broken, eye injured, falling	
11 Wm. Kinghorn. 20 Staunton. 1			1 1					1	Head injured, cage bottom of	
23 Nocolas Phivion 22 Glen Carbon 1 1 2 Foot injured, pit car and frog. 24 John Conte. 30 Stanton. 1 2 3 Body injured, kicked by mule. 24 John Kicklas 22 Maryville 1 2 3 Body injured, kicked by mule. 24 Maryville 1 2 3 Body injured, kicked by mule. 24 Maryville 1 2 3 Body injured, kicked by mule. 24 Maryville 1 2 4 5 Body injured, kicked by mule. 25 Maryville 1 4 5 Body injured, kicked by mule. 26 Maryville 1 4 5 Body injured, kicked by mule. 26 Maryville 1 4 5 Body injured, kicked by mule. 27 Mark by mule. 28 Maryville 1 4 5 Body injured, engine crank . 28 Maryville 1 4 5 Body injured, door and box. 28 Maryville 1 29 James Davison. 40 Worden. 1 1 20 James Davison. 40 Worden. 1 1 2 2 3 Joseph Drea 30 Edwardsville. 1 1 2 3 Joseph Drea 30 Edwardsville. 1 1 3 Back broken, falling state. 3 Joseph Drea 30 Edwardsville. 1 1 3 Back broken, falling state. 3 Joseph Drea 30 Edwardsville. 1 1 3 Back broken, falling state. 3 Joseph Drea 30 Edwardsville. 1 1 3 Back broken, falling state. 3 Joseph Drea 30 Edwardsville. 1 1 3 Back broken, falling state. 3 Joseph Drea 30 Edwardsville. 1 1 3 Back broken, falling state. 3 Joseph Drea 3 Joseph Drea 3 Back broken, falling state. 3 Joseph Drea 3 Joseph Drea 3 Back broken, falling state. 3 Joseph Drea 3 Joseph Drea 4 4 4 4 4 4 4 4 4	11 15 18	Wm, Kinghorn Geo. Nedles Leon Bogus	20 18 34	Staunton Collinsville Livingston	 i	1		2	Leg cut off, pit car and machine Arm injured, pit car	
10 Geo. Meadows 19 Gien Carbon 1	24	John Conte	130	Staunton			2	2	Arm broken, falling clod	
10 Geo, Micklas. 20 Williamson. 1							_		Finger broken, falling coal and	
15 James Rylance. 25 Worden. 1 1 2 Shoulder dislocated, falling rock 19 Pete Welchman. 23 Glen Carbon. 1 1 20 James Davison. 40 Worden. 1 1 2 Body injured, pit car and timber 23 Paul Stemplash. 38 Staunton. 1 7 7 7 7 7 7 7 7 7							4		Foot injured, frog and car Back and foot injured, falling	
23 Joseph Drea 30 Edwardsville 1	15 19 20	Pete Welchman James Davison	25 23 40	Worden Glen Carbon Worden	1 1 1		1	2 2	Shoulder dislocated, falling rock Foot injured, stepped on nail Body injured, pit car and timber Collar bone and arm broken,	
12 Louis Helli. 20 Maryville 1 Leg scalded, escaping steam 14 A. Miller. 40 Collinsville 1 Leg scalded, escaping steam 15 Wm. Carson 40 do 1 Hand injured, falling state. 18 John Wrick 20 Williamson 1 Hand injured, falling prop 18 John Wrick 20 Williamson 1 Hip injured, fell under pit car. 19 Joe Yanosh 20 Worden 1 Foot injured, falling clod 12 18 Hip injured, falling clod 19 Joe Yanosh 20 Worden 1 Shoulder injured, risb broken 10 18 P. Polletta, Jr. 21 Maryville 1 Hips injured, pit cars 18 Maryville 1 Hips injured, pit cars 18 P. Polletta, Jr. 22 Collinsville 1 Hips injured, pit cars 18 Maryville 1 Hips injured, pit cars 18 Maryville 1 Body injured, pit cars and rib. 18 John Sands 18 Maryville 1 Body injured, pit car and rib. 18 John Sands 19 J	23 23	Joseph Drea	30	Edwardsville	1	1		1 i	Back broken falling slate	
1 Joe Yanosh 20 Worden 1 Foot injured, falling clod Shoulder injured, falling clod Shoulder injured, its broken pit car and roof. Shoulder injured, pt car and rib. Shoulder injured, falling coal. Shoulder injured, falling coal. Shoulder injured, falling coal. Shoulder injured, pt car and rib. Shoulder injured, falling coal. Shoulder injured, falling coal. Shoulder injured, falling coal. Shoulder injured, pt car and rib. Shoulder injured, pt car and roof. Shoulder injured, and roof. Shoulder injured, and roof. Shoulder injured, ribs broken, pit car and roof. Shoulder injured, and roof. Shoulder	7 10 12 13	Wm. Hepworth Frank Mingelcamp Louis Heinz Geo. Slohlholer	$ \begin{array}{r} 36 \\ 18 \\ 20 \\ 20 \end{array} $	Worden Williamson Staunton Maryville		1 1 1 1			Leg scalded, escaping steam	
24 A. Stanit. 21 Maryville 1						1			Foot injured, fell under pit car.	
28 Fred Febenstrett. 40 Williamson 1 5 50 Williamson 1 5 5 5 5 5 5 5 5 5	24 28	A. Stanit P. Polletta, Jr	21 22	Maryville Collinsville					Finger injured, p.t car	
1	28	Fred Hebenstreit	40	WHIIIamson	- 4		8	3	Leg broken, fell on valve, boiler	
* Not recovered nor returned to work July 1, 1910. tunner of men injured	8	Chas. Stitcher	40	do					Leg injured, flying slate Hands and wrists scalded, es- caping steam.	
* Not recovered nor returned to work July 1, 1910. otal number of men injured umber not recovered July 1, 1910.	18 28	Geo. Mehosko	19	Livingston			2		Foot injured, under pit car	
otal number of men injuredumber not recovered July 1, 1910		Total			52	50	112	164		
	ntal ni	imber of men injured								
									-	

Recapitulation of Non-Fatal Casualties—Seventh District—1910.

Residence.	No.	Occupation.	No.	Cause of Accident.	No.	Colliery.	No.
Breese Central City. Centralia. Collinsville. Edwardsville. Glen Carbon. Livingston. Marysville. New Baden. Oden. Pocahontas. Staunton. Troy Williamson. Worden.	1 44 166 3 111 122 13 5 1 14 3 5 5	Cagers Drivers Engineer Fireman Laborers Loaders Machinist Machinist Machinist Mainers Mule feeder Shot firer Timbernen Trapper Watchman Watchman Watchman	24 1 11 15 15 26 1 1 6	Cable	1 1 10 11 2 23 1 2 1 1 1 1 1 2 2 1 2 1 1 2 2 1 1 1 1		3 2 8 222 3 5 10 11 12 11 14 14
Total	102		102		102		102

Recapitulation of Non-Fatal Casualties, Nature of Injuries, Conjugal Relations and Time Lost—Seventh District—June 30, 1910.

Nature of Injuries.	ber.	led.	0.00	ren.	Dependents.	Time Lo	st—Days.	Percent-
	Number	Married	Single.	Children,	Depe	Total.	Average.	injuries.
Ankle broken. Ankles injured. Arms broken. Arms injured. Backs injured. Backs injured. Backs injured. Body burned. Body burned. Bodies injured. Collar bone broken. Eyes injured. Fingers broken. Fingers broken. Fingers broken. Fingers broken. Fingers injured. Food amputated. Food amputated. Hand broken. Hand broken. Hand broken. Legs injured. Leg broken. Leg cut off. Legs injured. Legs broken. Leg cut off. Legs injured. Nose broken. Ribs injured. Ribs injured. Soboulders injured. Soboulders injured. Soboulders injured. Soboulders injured. Side injured. Wrist broken. Wrist broken.	1 3 2 2 2 2 2 9 1 1 7 7 2 2 1 1 3 3 1 1 1 1 5 5 1 1 1 3 2 2 1 1 1 1 1 3 2 2 1 1 1 1 1 1	1 9 4 2 2 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3	1 3 2 2 1 1 3 3 2 2 1 1 1 1 1 1 1 1 1 1	19 5 5 7 7 16 10 10 10 10 10 10 10 10 10 10 10 10 10	1 28 9 9 3 3 20 1 1 1 155 2 2 15 29 16 8 8 1	130 115 200 75 505 107 284 147 252 721 60 60 101 101 120 469 1,623 105 144 44 30 37 78	130.00 38.00 100.00 38.00 100.00 38.00 56.00 41.00 74.00 50.00 30.00 60.00 34.00 41.00 41.00 41.00 42.00 43.00 43.00 67.00 135.00 45.00 45.00 135.00 45.00 135.00 45.00	0.98 2.94 1.966 8.82 6.86 6.86 1.966 4.91 1.77 1.960 0.98 0.98 0.98 0.98 0.98 0.98 0.98 0.9
Total	102	52	50	112	164	5,997	64.00	100.00

Bond County-

			Ou	tput of M	lines in T	fons.	l product.
Number.	Name of Operator.	Postoffice address of the mines.	Mine run.	Глатр.	Other grades.	Total.	Aggregate value of total product
1	SHIPPING MINES. Pocahoutas M. Co., No. 1	Pocahontas	2,883	40,658	59,996	103,557	\$100,178

Mines in 1909, 2. Abandoned mines, 1. Mines in 1910, 1.

Clinton County-

			Ou	tput of M	fines in '	Γons.	product.
Number.	Name of Operator.	Postoffice address of the mines.	Mine run.	Lump.	Other grades.	Total.	Aggregate value of total product
1 2 3 4	SHIPPING MINES, Southern C. & M. Co., No. 9. Coöperative C. & M. Co., No. 1. Breese-Trenton M. Co., E. Mine. Breese-Trenton M. Co., Buxton Total—4 mines.	New Baden Breesedo. Beckemeyer	37, 833 17, 782 20, 774 27, 391 103, 780	161,416 148,559	103, 428 55, 561 68, 368	282, 626 224, 894 199, 278	213, 649 179, 350

Mines reported for 1909, 7. Abandoned mines, 3. Mines in 1910, 4.

Seventh District-1910.

Disposit Outp	ion of	r blasting	on.	E	mploye	ės.		Accio	lents.	solid or	Ani Un	nber of mals der-	
Tons loaded on cars for shipment.	Other purposes.	Kegs of powder used for coal.	Days of active operation.	Average number of miners.	All other employés.	Total.	Tons mined by hand.	Killed.	Injured.	Blasting coal—From sundercut or both.	Horses,	Mules,	Number.
96,830	6,707	5,990	186	100	49	149	77,894		2	Both,			1

Seventh District—1910.

Disposit Outp	ion of out.	or blasting	on.	E:	mployé	ės.		Accid	lents.	solid or	Ani Un	nber of mals der- und.	
Tons loaded on cars for shipment.	Other purposes.	Kegs of powder used for blasting coal.	Days of active operation.	Average number of miners.	All other employés.	Total.	Tons mined by hand.	Killed.	Injured.	Blasting coal—From undercut or both.	Horses.	Mules.	Number.
279, 466 279, 280 140, 236 170, 056 869, 038	14, 671 3, 346 84, 658 29, 222 131, 897	3,096 10,930 7,200 6,400 27,626	187 223 212 163 785	250 170 170 590	367 67 58 60 532	367 317 208 230 1,122	282, 626 224, 894 199, 278 706, 798	1	5 2 3 	U. C Solid do			1 2 3 4

Madison County-

-			Ou	tput of Mi	nes in Ton	S.	d product.
Number	Name of Operator.	Postoffice address of the mines.	Mine run.	Lump.	Other grades.	Total.	Aggregate value of total product
	SHIPPING MINES.						
10 11 12 13	New Staunton C. Co., No. 1 Mt Olive & Staunton C. Co., No. 2 Lumaghi C. Co., No. 2 Mt. Olive & Staunton C. Co., No. 2 Mt. Olive & Staunton C. Co., No. 1 Donk Bros. C. & C. Co., No. 3. Donk Bros. C. & C. Co., No. 1 Donk Bros. C. & C. Co., No. 3. Donk Bros. C. & C. Co., No. 3 Donk Bros. C. & C. Co., No. 3 DeCamp C. M. Co., No. 1 Kerns-Donnewald C. Co. Edwardsville C. Co., No. 3 Holepadent Coal Co. Independent Coal Co. Total.	Williamson Cantine Maryville Staunton Donkville Troy Glen Carbon .do Cantine Staunton Worden Edwardsville.	38,337 26,579 7,592 5,096 4,585 6,624 8,446	252,711 269,108 190,334 191,884 154,549 132,837 125,247 120,769 97,049 80,143 58,500 18,018 6,300 4,636	227, 464 173, 387 200, 127 143, 679 101, 587 124, 267 99, 088 66, 481 62, 629 81, 634 75, 204 39, 324 10, 140 6, 510 3, 362	548, 220 390, 461 373, 900 282, 715 264, 696 229, 431 195, 218 187, 983 185, 307 163, 795 107, 624 34, 263 25, 620 21, 229 23, 028	\$582, 432 507, 826 309, 696 323, 885 258, 226 167, 735 217, 079 179, 600 172, 944 139, 822 188, 364 105, 470 39, 100 25, 629 16, 770 18, 503 \$3, 253, 072
	LOCAL MINES.						
10	Edwardsville Home Trade C. Co. Bulleck Bros. Troy Coöp. C. & M. Co. Perry Meyers. Big Mound C. Co. Geo. Kabel	Collinsville Troy. Bethalto New Douglas Moro. Prairietown. Bethalto N. Alton Carpenter.	14,870 6,598 5,600 1,300	1,300 1,073 1,000 800	1,624	22, 440 21, 354 13, 196 5, 600 1, 800 1, 300 1, 000 1, 000 800 800 560 480	3, 150 2, 860 2, 275 1, 716
	Total		39,589	26,013	6, 101	71,703	\$92,644
	Total—29 mines		441,334	1,856,837	1,420,984	3,719,155	\$3,345,716

^{*} Formerly Henrietta Coal Co., changed hands Jan. 15, 1910. Mines reported for 1909, 31. Abandoned mines, 2. Mines in 1910, 29.

Seventh District-1910.

604 839														
Fig. Fig.	Outr	tion of out.	for blasting	ion.	Eı	nployé	s.		Accid	ents.	solid	Anir Unc	f nals ler-	
559,087 9,133 2,966 185 466 466 2 5,400 385,316 5,145 3,74 211 362 9 ,400 362 9 ,400 362 9 ,400 362 9 ,400 362 2 9 ,400 362 2 9 ,400 362 362 362 9 ,400 362	Tons loaded on cars for shipment.	Other purposes.	Kegs of powder used coal.	Days of active operati	number	All other employés.	Total.	Tons mined by hand.	Killed.	Injured.	Blasting coal—From undercut or both.			Number.
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	539, 087 385, 316 362, 887 267, 501 254, 893 219, 164 168, 426 165, 770 99, 624 18, 061 6, 000 9, 784	9, 133 5, 145 11, 013 15, 214 9, 803 10, 267 23, 792 22, 213 6, 182 7, 405 8, 000 16, 202 19, 620 11, 445 11, 081	2,906 3,374 3,858 1,475 9,944 7,198 1,878 3,324 1,504 1,323 933 363 800 651 395	185 211 166 174 154 207 161 160 215 224 196 218 135 267	224 225 160 15 56 124 	466 362 243 299 93 138 219 194 147 242 183 51 53 2	466 362 467 299 318 298 234 250 147 366 183 51 83	264, 696 229, 431 23, 723 77, 657 2, 557 25, 620 21, 229 23, 028	2 3 1 1 1 1 1 1	5 9 122 6 7 3 3 8 1 8 5 3	dodododododo			1 2 3 4 5 6 7 8 9 10 11 11 12 13 14 15 16
		21,354 13,196 5,600 1,800 1,300 1,000 1,073 1,000 800 800 560	539 191 145 30 7 30 40 4 4	267 261 25 220 30 218 175 75 120 175	17 10 19 5 6 4 3 5 2 5 5	4 2 18 1 1 2 1 1 1 1 1 1	21 12 37 6 7 6 4 6 3 6 6	21,354 13,196 5,600 1,800 1,300 1,300 1,073 1,000 800 800	1					1 2 3 4 4 5 6 7 8 9 10 11 11 12 13
	3,448,814		1,419	163	983				-					

Marion County-

_			Ou	tput of M	dines in '	Γons.	l product.
Number.	Name of Operator.	Postoffice address of the mines.	Mine run.	Lump.	Other grades.	Total.	Aggregate value of total product
6	SHIPPING MINES. Centralia Coal Co., No. 2. Centralia Coal Co., No. 4. Marion Co. Coal Co., No. 1. Odin Coal Co., Odin. Chicago-Sandoval C. Co., No. 2. Centralia Coal Co., No. 5. Chicago-Sandoval C. Co., No. 1.	Centralia Sandoval	5, 964 17, 741 17, 455 45, 171 43, 824 30, 229	63,001 49,272 106,308 62,229 36,029	123, 169 90, 990 45, 560 36, 714 52, 020 2, 200	203, 911 157, 717 151, 868 144, 114 131, 873 37, 929	\$214,070 183,520 141,945 144,275 126,099 118,685 33,187 \$961,781

Mines in 1909, 7. Mines in 1910, 7.

Washington County-

-			Ou	itput of M	dines in '	Fons.	l product.
Number.	Name of Operator.	Postoffice address of the mines.	Mine run.	Lump.	Other grades.	Total.	Aggregate value of total product.
1 2 3	LOCAL MINES. Kuhn-Coolery Co. Finke Harris C. Co. Fauke & Gussman Total—3 mines.	DuBois Nashville St. Libory	6,397	12,503 1,760 14,263		16,670 6,397 1,760 24,827	\$13,961 5,885 2,640 \$22,486

Mines reported for 1909, 3. Mines in 1910, 3.

Seventh District-1910.

Disposit Outp		d for blasting	tion.	Jo	mployé	ės.	d.	Accio	lents.	n solid or	Ani: Un	nber of mals der- and.	
Tons loaded on cars for shipment.	Other purposes.	Kegs of powder used for coal.	Days of active operation	Average number o miners.	All other employés.	Total.	Tons mined by hand.	Killed.	Injured.	Blasting coal—From undercut or both.	Horses.	Mules.	Number.
138,271 149,793 153,842 139,372 135,514 128,239 34,929 879,960	3,875 12,496 8,600 3,634 3,000	8,439 7,419 1,590 1,438 5,989 4,414 1,500 30,789	210 200 203 185 202 105 132	225 186 95 	\$8 72 75 226 47 95 30	313 258 170 226 207 285 90 1,549	237,856 203,911 144,114 120,092 37,929 743,902	4	1 2 1	Soliddo U. Cdo Solid Both			1 2 3 4 5 6 7

Seventh District—1910.

Disposit Outp	ion of ut.	ed for blasting	ation.	Jo	mploye	ės.	nd.	Accio	lents.	om solid or	Ani	mals der-	
Tons loaded on ca for shipment.	Other purposes.	Kegs of powder used for coal.	Days of active operation.	Average number miners.	All other employés.	Total.	Tons mined by band.	Killed.	Injured.	Blasting coal—From undercut or both.	Horses.	Mules.	Number.
	16,670 6,397 1,760 24,827	52 428 60 540	90 130 130 117	50 25 3 78	16 10 1 27	66 35 4 105	16,670 6,397 1,760 24,827						1 2 3

Shipping Mines-Recapitulation by

			Productio	n of Differ	ent Grade	s in Tons.			all
Counties.	Number of mines.	Mine run.	Lump.	Egg.	Nut.	Pea.	Slack.	Total.	Average value per ton- grades.
Bond	1	2,883	40,658	12,625	12,713	27,950	6,708	103,537	\$0.968
Clinton	4	103,780	555,994	3,530	67,292	209,218	61,121	1,000,935	0.944
Madison	16	401,745	1,830,824	235,609	103,396	691,589	384,289	3,647,452	0.892
Marion	7	160,384	381,613	153,883	53,191	276,669	39,528	1,065,268	0.903
Total	28	668,792	2,809,089	405,647	236,592	1,205,426	491,646	5,817,192	\$0.906

Local Mines—Recapitulation by

			Productio	n of Diffe	rent Grade	es in Tons.			all III
Counties.	Number of mines.	Mine run.	Lump.	Egg.	Nut.	Pea.	Slack.	Total.	Average value per ton- grades.
Madison	13	39,589	26,013	6,101				71,703	\$1.292
Washington	3	6,397	14,263			4,167		24,827	0.906
Total	16	45,986	40,276	6,101		4,167		96,530	\$1.193
Grand total	44	714,778	2,849.365	411,748	236,592	1,209,593	491,646	5,913,722	\$0.909

Whole number of mines reported for 1909, 50. Number of mines abandoned during the year, 6. Whole number of mines reported for 1910, 44.

Counties—Seventh District—1910.

Disposit Output–	Disposition of cutput—Tons.				Em	ployé	9.			В	Blasting Coal.			
Loaded on cars for shipment.	Other purposes.	Kegs of powder for b	Days of active operation.	Miners.	Others.	Boys.	Al! above ground.	Total.	Tons mined—By hand.	From solid-Tons.	Undereut—Tons.	Both methods—Tons.		
96,830	6,707	5,990	186	100	32	3	14	149	77,894			103,537		
869,038	131,897	27,626	196	590	460	10	62	1,122	706,798	706,798	294, 137			
3,448,814	198,638	44,858	192	882	2,895	60	345	4,182	667,941	564,004	2,665,984	417,464		
879,960	185,308	30,789	177	916	486	7	140	1,549	743,902	623,810	309,585	131,873		
5,294.642	522,550	109, 263	188	2,488	3,873	80	561	7,002	2,196,535	1,894,612	3,269,706	652,874		

Counties—Seventh District—1910.

Disposit Output—	ion of Tons.	blasting	1.		Em	ployé	is.			В	lasting Cos	ıl.
Loaded on cars for shipment.	Other purposes.	Kegs of powder for b	Days of active operation.	Miners.	Others.	Boys.	All above ground.	Total.	Tons mined—By hand.	From solid—Tons.	Undercut—Tons.	Both mehtods—Tons.
	71,703	1,449	163	101	13		26	140	71,703			
	24,827	540	117	78	10		17	105	24,827			
	96,530	1,989	154	179	23		43	245	96,530			
5,294,642	619,080	111,252	176	2,667	3,896	80	604	7,247	2,293,065	1,894,612	3,269,706	652,874

All Mines—Recapitulation by

			Production	n of Differ	ent Grade	s in Tons.			-all
Counties.	Number of mines.	Mine run,	Lump.	Bgg,	Nut.	Pea,	Slack.	Total.	Average value per ton- grades.
Bond	1	2,883	40,658	12,625	12,713	27,950	6,708	103,537	\$0.968
Clinton	4	103,780	555,994	3,530	67,292	209,218	61,121	1,000,935	0.944
Madison	29	441,334	1,856,837	241,710	103,396	691,589	384,289	3,719,155	0.90
Marion	7	160,384	381,613	153,883	53,191	276,669	39,528	1,065,268	0.903
Washington	3	6,397	14,263			4,167		24,827	0.906
Total	44	714.778	2,849,365	411,748	236,592	1,209,593	491,646	5,913,722	\$0.909

Counties—Seventh District—1910.

Disposit Output-	ion of Tons.	blasting			Em	ploye	s.			В	lasting Coa	ıl.
Loaded on ears for shipment.	Other purposes.	Kegs of powder for bl	Days of active operation	Winers.	Others.	Boys.	All above ground.	Total.	Tons mined By hand.	From solid-Tons.	Underent Tons.	Both methods - Tons.
96,830	6,707	5.990	186	100	32	3	14	149	77,894			103.537
869,038	131,897	27,626	196	590	460	10	62	1,122	706,798	706,798	294,137	
3,448,814	270,341	46,307	179	983	2,908	60	371	4,322	739,644	564,004	2,665,984	417,464
879,960	185,308	30,789	177	916	486	7	140	1,549	743,902	623,810	309,585	131.573
	24.827	540	117	78	10		17	105	24,827			
5,294,642	619,080	111,252	176	2,667	3,896	80	604	7,247	2,293,065	1,894,612	3,269,706	652,874

EIGHTH INSPECTION DISTRICT-1910.

FIFTH ANNUAL REPORT.

Counties-Randolph, St. Clair.

WALTER RUTLEDGE, Inspector, Alton.

Hon. David Ross, Secretary State Bureau of Labor Statistics, Springfield:

SIR—Conforming to the requirements of section 12 of the general mining law, I herewith submit the fifth annual report of the Eighth district as now formed. The counties compraint this district are Bandounh and St Clair

formed. The counties comprising this district are Randolph and St. Clair. Summarizing the main features set forth in the county tables, the follow-

ing is presented for the fiscal year ended June 30, 1910:

0 1	
Number of mines	86
Shipping mines	65
Local mines	21
Number of mines	3,273
Number of miners	
Others underground	2,484
Boys underground	67
Number employed above ground	513
Total number of employes	6,337
Total tons of coal produced	5,031,524
Mine run coal	1,353.986
Lump coal	2,586,800
Egg coal	40,925
Nut coal	251,237
Slack and waste	109,434
Aggregate value of the total product at the mines	4.671.722
Aggregate value of the total product at the mines	4,511,722
Tons shipped from the mines	
Supplied to locomotives	76,226
Sold to local trade	217,466
Consumed or wasted at the mine	193,063
Number of days worked	180
Tons mined by hand	2,889,312
Mined by machine	2,142,212
Number of mining machines in use	188
Number of kegs of powder consumed	129,204
Number of motors in use	17
Number of fatal accidents	16
Number of non-fatal accidents	57
Tons of coal mined to each fatal accident	314.470
Tons of coal mined to each fatal accident	
Tons of coal mined to each non-fatal accident	88,272
Number of employes to each fatal accident	396
Number of employes to each non-fatal accident	111
Number of fatal accidents to each 1,000 employes	2.5

THE OUTPUT.

The following comparative statement is shown, giving the total output of the counties for the years 1909 and 1910, with the increase or decrease in tonnase:

Counties.	Total Output	Increase.	
counties.	1909.	1910.	
Randolph	757,622	846,969	89,347
St. Clair	3,409,362	4,184,555	775,193
Total	4,166,984	5,013,524	864,540

St. Clair county, notwithstanding the almost entire suspension of mining during the months of April and May, shows an increase in output of 775,193 tons, or 22.74 per cent over the tonnage of last year.

IMPROVEMENTS.

No improvements worthy of notice have been made in the mines of the Eighth district during the last year, except the number of coal operators putting in the required fire protection underground.

AMENDMENTS TO THE MINING LAWS.

The mining law should be so amended that fire protection should be installed on the surface, and at all mines where the escapement shafts are less than 300 feet from the main shaft or new escapement shafts put down.

In this district 75 per cent of the mines are very old, having been sunk from 20 to 40 years ago. These escapement shafts are too small and are too close to the main shafts. The tipples and buildings around these shafts are of the old style, covered with planking and are very dangerous as regards fire on the surface.

The law also ought to provide that all coal should be mined and sheaved before being blasted. Face or entry mine managers should be placed in all mines, to see that the timbering in the working faces is properly done; that all places are made safe; that the placing of shots and the required quantity of powder used and the proper damping of the coal dust. This would reduce the number of accidents one-half, caused by falls of coal and slate.

There should also be a proper system of checking men in and out of the mine. A recording gauge should be put at each fan to show if the fan has been run regular. Some more responsibility ought to be attached to the owners and mine managers as regards the safety of the mine and the carrying out of the mining law. The inspectors ought to have the power to classify the mines under the late amendments. A number of the small local mines will quit mining, not being able to put in fire protection underground, and in a number of places it is not required, as the bottom of these shafts is all rock roof, no timbering being required.

ABANDONED MINES.

The mine of the Marissa Coal & Mining Company, owned by the Consolidated Coal Company of St. Louis, Mo., located at Marissa, St. Clair county, was abandoned during the year. The local mine of H. M. Welshaus at Blair, Randolph county, has been abandoned. The local mine of the Beatty Coal Company at Mascoutah, St. Clair county, has not been operated during the year.

NEW MINES.

The Star Coal Company of Freeburg, St. Clair county, has opened a new mine during the year. A local mine at Belleville, owned by Richard Schram and Sons, has been opened during the year. A shaft has been sunk by E. Thomas and Son at St. Libory, St. Clair county, during the year. It is reported that large mines will be opened at this place, as a new railroad is now being built to this mine.

CHANGE OF NAMES.

From this time on the mine of the Murphy Coal Company will be operated by the Reeb Bros. of Belleville, St. Clair county. The mine of the Coulterville Coal Company at Coulterville, Randolph county, will be operated by the Randolph County Coal Company. The mine of the Belleville and O'Fallon Coal Company will hereafter be operated by the Wilharmile Coal Company.

FATAL ACCIDENTS.

The detailed description of fatal accidents occurring in this district for the year ended June 30, 1910, is as follows:

October 6, 1909, Harry Welch, loader, aged 30 years, married, was killed in the Consolidated Coal Company's mine No. 17, Collinsville, Madison country. The mine, however, is in St. Clair county. He was killed by falling draw slate in the second east entry on the north side of the shaft. The piece of slate that fell on the deceased was seven feet from point to point and four and one-half feet across the broadest part and was from six to seven inches thick; height of coal, seven and one-half feet. He leaves a widow.

November 26, 1909, J. W. Wood, miner, aged 42 years, married, was killed by falling clod in the Co-operative Coal Company's mine at New Athens, St. Clair county. He was mining off a standing shot and it was supposed he had mined the coal to a crack left by the blast. The weight of clod above the shot caused the coal to fall, killing him instantly. He leaves a widow and five children.

November 26, 1909, John Browning, miner, aged 52 years, was killed in the Sunlight mine, Freeburg, St. Clair county, by falling coal and slate on fourth entry on third east entry in a cross cut. He was in the act of undermining a standing shot and it was supposed he was standing on loose coal when the coal and slate gave away. It was evident he fell forward under the shot. He leaves a widow and seven children.

December 18, 1909, Otto Waters, driver, aged 19 years, single, was killed in the Willis Coal and Mining Company's No. 6 mine at Percy, Randolph county, by coming in contact with an electric wire. He came out of the main east entry to the parting, where the electric motor track ends, it being quitting time he and some miners were waiting there, until the signal was given that the power was off the wire. Deceased was sitting on the edge of an empty mine car and the same side the trolley wire is on. He leaned backwards and the back of his neck touched the live wire, killing him instantly.

December 7, 1909, Melvin Lee, car pulling engine tender, aged 23 years, single, was severely injured by being caught in the machinery of the car pulling engine at the Breese-Trenton Coal Company's mine, two miles west of Trenton, St. Clair county. The engine had stopped on the center. He took hold of the fly wheel to throw the engine over the center, without shutting off the steam. The engine started quickly and jerked him over among the machinery, which mangled his body so much that he died December 19, 1909.

December 27, 1909, Homer Welsh, miner, aged 45 years, married, was killed by falling clod, in the Ridgefarm mine of the Joseph Taylor Coal Company. Deceased was working in room No. 6 off the second east, on the

north side of the mine. The room was in 85 feet and 35 feet wide. Clod had been taken down at different times ever since the room was opened. The clod that killed Welsh was hanging back from the face and should have been taken down before beginning work in the morning. He leaves a widow and three children.

March 21, 1910, Philip Kiefer, miner, aged 30 years, single, was killed by falling slate in the Crystal mine of the Bessemer Washed Coal Company at Tilden, Randolph county. The room was examined by the mine examiner in the morning and he considered the place safe. There was a large slip in the slate, which could not be seen until it fell. It was supposed Kiefer was undermining a standing shot, when the slate fell and caught him. Plenty of props and cap pieces were in the place.

March 23, 1910, Frank Saas, miner, aged 43 years, single, was killed by a falling slate in the No. 1 mine of the St. Louis and O'Fallon Coal Company at French Village, St. Clair county. Deceased was working in room No. 27, second west entry on the south side of the shaft. He was in the act of working down a standing shot on the left side of the room. There was a slip in the slate five feet from the rib, running parallel with the room. Deceased was under this slate working when the slate fell and caught him,

killing him instantly.

May 24, 1910, John Potojon, miner, aged 44 years, married, was killed in the mine of the Star Coal Company at Freeburg, St. Clair county. The deceased charged a blast in the coal with powder, then lighted the squib and ran to a place of safety. After waiting some time he thought the squib had missed fire and ran back to the shot to try and fire it with another squib, but just as he reached the shot it exploded and threw him a distance of twelve feet, severely injuring him. He died the following morning. He leaves a widow and one child.

May 26, 1910, Robert Gibson, driver, aged 22 years, was injured September 10, 1909, in the Wilson Bros. Coal Company's mine at Sparta, Randolph county. He was coming out with a loaded trip of mine cars, and from some cause he slipped and fell under the cars. His hips and body were badly bruised, from which he died May 26, 1910. He leaves a widow and one

child.

May 27, 1910, Nickolas Mueth, cager, aged 49 years, single, employed in the mine of the Missouri and Illinois Coal Company at Rentchler, St. Clair county. A mine car had gotten off the track close to the cage. Mueth and two other men were working with a pry, standing on the cage, trying to raise the car up and put it on to the track. In some way the bell lever was struck, which gave a signal in the engine room. The engineer lifted the cage, causing the piece of timber used as a lever, which was 4 by 4 inches square and 12 feet long, to fly up, striking Mueth on the head, killing him.

May 27, 1910, Charles Wilson, miner, aged 56 years, was killed by falling slate in the mine of the L. Leniox Coal Company, two miles south of Belleville, St. Clair county. The deceased was taking down slate on the main entry, 300 feet from the shaft bottom. The slate being full of slips, more of it came away than he expected, knocking him down, causing his death.

He leaves a widow and two children.

June 7, 1910, Martin Ewert, miner, aged 53 years, employed in the mine of the Mulberry Hill Coal Company, Freeburg, St. Clair county, was killed at the working face of his room by falling slate, which came away at a slip. It was eight feet long, four feet wide and five inches thick. He leaves

a widow and one child.

June 8, 1910, Jesse Grieves, mine examiner, aged 26 years, was killed in the mine of the Summitt Coal Company, located two miles north of Belleville, St. Clair county. Deceased was mine examiner and also mined coal part of the time. He had examined the place where he was killed in the morning before beginning work. 'After being through examining he went into his room to mine coal, when a piece of slate weighing about 400 pounds fell and caught him, from which he died. He leaves a widow.

June 15, 1910, John Coleman, driver, aged 22 years, single, was killed in the mine of the Breese-Trenton Coal Company, two miles west of Trenton St. Clair county. Deceased was coming down a grade with seven loaded cars, when his lamp fell from his cap, leaving him in the dark. The mule then backed up, knocking him off of the car seat, and the cars ran over him, injuring him so that he died a short time afterwards.

June 27, 1910, Blain Solmon, driver, aged 27 years, single, was killed by the kick of a mule, while driving in the mine of the International Coal Company, located at Carbon, St. Clair county. The mule kicked him in the stomach, injuring him so severely that he died in a few hours. No one was

present when the accident happened.

The tables of the fatal and non-fatal accidents, together with the usual county tables, follow.

Respectfully submitted,

Walter Rutledge, State Mine Inspector, Eighth District, Alton, Ill.

Fatal Casualties—Eighth District—July 1, 1910.

Date.	Name.	Age.	Occupation.	Residence. (Town.)	Married.	Single.	Widows.	· Children.	Dependents.	Cause of Accident.
Dec. 18 7 1910 Mar. 21 23 May 24 26 27 June 7 8	Otto Waters Melvin Lee Homer Welsh Phillip Kiefer Frank Saas John Potojon Robt. Gibson Nickolas Mueth Charles Wilson Martin Ewert Jesse Grieves John Coleman	19 23 45 30 43 44 22 49 56 53 26 27 27	Driver Laborer Miner .do .do .do .do .Driver Cager .do .do .Do .Driver .do	Percy Trenton O'Fallon Tilden French Village Freeburg Sparta Rentchler Belleville Freeburg Belleville Trenton Carbon	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	··· i i i i i i i i i i i i i i i i i i	3 1 1 2 1	··· 4 ··· 2 2 2 1	Kicked by mule

Recapitulation of Fatal Casualtics—Eighth District—1910.

Residence.	No.	Occupation.	No.	Cause of Accident.	No.	Colliery.	No
Belle ville Carbon Callinsville Freeburg French Village New Athens O'Fallon Percy Rentchler Sparta Tilden Trenton	1 3 1 1 1 1	Cager Drivers Laborer Loader Miners	4 1 1	Electrocuted Falling coal Falling Clod Falling Clod Falling State Flying lever Fly wheel Kicked by mule Pit cars. Premature blast	2 1 6 1 1 1 2 1	Bessemer Washed Bresse-Trenton Coöperative Consolidated International Missouri & Illinois Mulberry Hill St. Louis & O'Fallon Senier Star Summit Sunlight Taylor, Joseph Willis Willis Wilson Bros	
Total	16		16		16		1

Non-Fatal Casualties—Eighth District—July 1, 1910.

				_					
Date.	Name.	Age.	Residence, (Town.)	Married.	Single.	Children.	Dependents.	Character of Injury and Cause of Accident.	Time lost—days
July 8	Henry Schwartz Fred Short	65 26	Belleville Percy	1		5 2	3	Ribs broken, falling coal Back bone dislocated, falling	60
9 20	Herb. Hollingarth Jule Barhmann Saul McCune	31 24	do Belleville				4	slate. Body injured, pit cars Leg broken, fell from pit car Hand cut badly, falling with	* 54 80
Aug. 9	Jàcob Gellner	31	do	1		1		knife. Hip and stomach injured, falling slate.	30 36
Sept. 2	Thomas Hendricks Joseph Combs. Jr John Schmitz	29	Collinsville	1		6 3	4	Thumb mashed, pit car Toe injured, falling coal	90 32 33
17	Wm. Yankansky Wm. Murdock	20	Denevine	1		,		Foot injured, pit car Body injured, falling slate in road	35 30
13 14	August Keller Joseph Pill Allen Dokenson Adam Trogerser	28 28 59	do Trenton	i	1	2	3	Leg broken, falling clod Foot injured, falling slate Fingers broken, unloading prop Fingers broken, falling slate	60 60 30 45
	William Lugge	34	do	1		4		Toe cut off, pit car. Head and hips injured, falling slate.	90 35
5	John Novok August Bunkerod	30	Lenzburg	• •	1		• • • •	Arm broken, falling slate Body injured, permanently disabled falling slate	*
6, 9	Louis Busckous Joseph Steiner Fred Scharpf Joseph Topfer	64	Collinsville	1	··· i	2 4 5		Fingers injured, pit car. Hand injured, falling slate Knee injured, iron rails, pit car. Leg broken, felling slate.	30 60 69 60
Dec. 7	Henry Meyer Henry Ethridge Henry Hudskamp	30 24 56	Belleville Trentondo	1 1	1	2		Thumb injured, pit cars. Leg broken, falling slate Thumb amputated, pit car Foot injured, pick	30 70 85 30
24	Edward Dockel John Ebert Fred Raith Joseph Guiney	22	Trenton	1	-	 2 2	1 3	Leg broken falling coal Face injured, flying coal Leg broken, falling coal Arm injured, pit cars, machine.	65 32 90 38
1910				1	1	_		Ribs broken, mule and pit car .	50
6 7 7	William Southern Earnest Schoenebeck. Aug. Boehum Walter Wine	36	Belleville Percy	i 	1	3		Hips injured, falling coal Knee injured, falling slate Knee injured, pit car Body injured, pit car and prop.	30 40 57 100
20 31 Feb. 5	Aug. Blowitz Aug. Blowitz Edward Sills Martin Brekshot James Boren Thomas White George Miller Eliss Engeh	27 22	do	i	i	₂	3.	Body injured, pit cars	60 43 56
9 14 22	Thomas White George Miller Elias Enoch Zeda Little	29 32 18	dododo	1	1		1	Leg broken, falling coal. Ankle broken, falling coal. Back injured, railroad car door. Foot injured, pit car Arm injured, pit car and cross-	45 30 30
Mar. 28	Jule Kreider Trwiu Strain	30 32	Collinsville do	1		2 2	3	Hip dislocated, falling coal Ribs broken, pit car Back injured, falling clod	30 60 35
10 16	Henry Knollhoff	40 21	do	i	i	3	4	Knee injured, pit car	30 40 30
17 19 22	William Sybert Terry Moore Walter Mason	58 22 35	Freeburg Belleville	i	i	2	3	Hip dislocated, pit car Body injured, falling clod	50 38 60
23 24	H. Smithers Rheim Showbeck	$\frac{24}{26}$	do	1	i		1	Body injured, pit car	35 30

Non-Fatal Casualties—Eighth District—Concluded.

Date.	Name.	Аде.	Residence. (Town.)	Married.	Single.	Children.	Dependents.	Character of Injury and Cause of Accident.	
	Frank Gloezeske	29 68 30	Belleville Caseyville Sparta	1	i	5	1	Head and back injured, falling slate. Eye injured, pick. Leg broken, falling clod. Back injured, falling slate	* * *
Total n	recovered July 1, 1910. umber of men injured. r not recovered July 1,	1910)					,	57 7
Nu	mber recovered July 1,	1910)						50
Total ti	me lost by men recove time lost by men reco	red- vere	–daysed—days					2, 58	438 .96

Recapitulation of Non-Fatal Casualties—Eighth District—1910.

Residence.	No.	Occupation.	No.	Cause of Accident.	No.	Colliery.	No.
Belleville Carbon Caseyville Collinsville Collinsville Freeburg Freeburg Masses Masses Sandard Sandard Freeburg Tilden Trenton	1 10 1 1 1 3 1 4 4 1 2	Cager. Drivers. Laborers. Loaders. Minerhe helper. Motorman. Shot firer. Timberman. Top laborer. Tracklayer. Triprider	144 55 233 1 1 2 2 3 1 1 1	Car door Falling clod. Falling coal. Falling state. Flying coal. Flying coal. Pick. Pick. Pit cars. Prop.	5 10 15 1 1 2 21	Bessemer Washed Borders Borders Borders Bretz & Schilling Culley-Miller Consolidated Dewey Highland Kolb Pittsburg Prairie St. Louis & O'Fallon Southern Summit Sumplit Superior Vulcan Willis Wilson Bros.	
Total	57		57		57		5

Recapitulation of Non-Fatal Casualties, Nature of Injuries, Conjugal Relations and Time Lost—Eighth District—June 30, 1910.

Nature of Injuries.	Number.	Married.	Single,	Children.	Dependents.	Time Los	A verage.	Percentage of injuries.
Ankle broken Arm broken Arm sinjured Backbone dislooated Backs bone dislooated Backs injured Bodies injured Eye injured Face injured Fingers broken Feet injured Hands injured Heads and hips injured Hips broken Lips injured The booken The booken Thumbs injured The booken Thumbs injured Though Thumbs Thumb Thumb Thumb Thumb Thumb Thumb Though Toes injured Toes injured	1 1 3 3 1 3 8 1 1 3 4 4 2 2 2 3 3 2 4 10 3 3 11 10 10 10 10 10 10 10 10 10 10 10 10	1 1 1 1 1 1 1 1 2 1 2 1 2 1 2 2 2 2 2 2	2 4 	1 2 2 5 5 4 2 7 4 8 8 1 8 26 7 4	1 2 3 3 3 1 1 9 1 1 1 6 3 9 5 10 2 10 33 9 6 1 115	98 60 382 32 105 155 90 35 188 66 571 145 147 90 33 2,438	33 20 48 32 35 36 45 18 63 33 349 57 48 49 90 90 33	1.75 5.26 1.75 5.26 14.04 1.75 5.26 7.04 3.51 3.51 7.04 17.54 5.26 6.26 1.75 5.26 1.75 5.26 1.75 1.75 1.75 1.75 1.75 1.75 1.75 1.75

Randolph County-

_			Ou	tput of M	Iines in	Tons.	al product.
Number.	Name of Operator.	Postoffice address of the mines.	Mine run.	Lump,	Other grades.	Total.	Aggregate value of total product.
2 2 4 5 6	SHIPPING MINES. Willis Coal & Mining Co., No. 6 Bessemer Washed Coal Co., Crystal. Moffat Coal Co., No. 1. Illinois Fuel Co., No. 4. Jones Bros C. & M. Co. Eureka No. 2. Wilson Bros Coal Co., No. 7. Bessemer Washed Coal Co., Tilden. Boyd Coal & Coke Co., No. 1. Randolph Co. C. M. Co., Old Mine. West Mine Coal Co.	Tilden Sparta .do .Tilden Sparta Tilden Sparta Coulterville .do	23,512 37,223 32,239 13,600 27,960 10,166 40,828 561	21,298	6, S13 25, 468 20, 616 9, 860 13, 558 12, 980 10, 637 19 15, 736 7, 099	28,397	\$240,670 126,070 80,869 70,495 55,675 61,213 54,265 45,010 34,712 26,977
1 2 3 4	LOCAL MINES. J. C. Boyle & Son. J. W. Wright. J. W. Bixby. John Adams. Total.	do do Willisville	1,000	13,768	188 185 773	8, 400 3, 112 2, 292 1, 737 15, 541	\$12, 175 3, 890 2, 454 2, 816 \$21, 335
	Total		393,763	329,647	123,559	846,906	\$817, 291

Mines reported for 1909, 15. Abandoned mines, 1. Mines in 1910, 14.

Eighth District—1910.

Dispositi Outpu	on of it.	for blasting	on.	E	mployé	s.		Accid	ents.	solid or	Nun O Anii Uno grou	f nals ler-	
Tons loaded on cars for shipment.	Other purposes.	Kegs of powder used for blasting coal.	Days of active operation.	Average number of miners.	All other employés.	Total.	Tons mined by hand.	Killed.	Injured.	Blasting coal—From undercut or both.	Horses.	Mules.	Number.
220, 078 120, 666 91, 567 77, 126 65, 594 64, 880 53, 594 38, 737 38, 078 25, 580 795, 900	6, 969 5, 404 6, 000 2, 530 4, 000 3, 135 671 2, 181 1, 821 1, 817	3,867 5,327 1,583 1,475 2,513 2,935 2,209 1,330 1,893 25,532	208 155 190 182 180 192 127 174 196 175	105 70 55 63 55 51 48 35 482	68 37 136 43 19 17 22 31 13 13 399	68 142 136 113 74 80 77 82 61 48	27, 052 126, 070 69, 594 68, 015 54, 265 40, 918 39, 899 28, 397 454, 210	1 1	2	Both Solid U. C do d			1 2 3 4 5 6 7 8 9
	8,400 3,112 2,292 1,737	250 103 133 131	300 125 90 145	4 4 4 5	1 2 1	4 5 6 6	8,400 3,112 2,292 1,737						1 2 3 4
795, 900	15,541 51,069	26, 149	165 174	17 499	403	902	15,541 469,751	3	7				

-		1	(Output of M	fines in 7	Fons.	l product.
Number.	Name of Operator.	Postoffice address of the mines.	Mine run,	Lump.	Other grades.	Total.	Aggregate value of total product
	SHIPPING MINES.						
122 13 144 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 33 34 35 36 37 38 38 38 38 38 38 38 38 38 38 38 38 38	St. Louis & O'Fallon C. Co., No. 2. Consolidated Coal Co., No. 17. St. Louis & O'Fallon C. Co., No. 17. Prairie Coal Co., Prairie Mine Jos. Taylor Coal Co., Prairie Mine Jos. Taylor Coal Co., Patrie Mine Jos. Taylor Coal Co., St. Ellen Royal Coal & Mining Co., No. 8 Bessemer Washed C. Co., Oak R'ge Superior C. & M. Co. Superior The Coal Co., Co., Co., Co., Co., Co., Co., Co.,	do d	25, 469 2, 650 8, 505 6, 086	13,532 62,750 40,916	47, 260 47, 260 55, 753 18, 575 41, 000 31, 520 40, 604 36, 131 32, 611 29, 612 29, 612 21, 000 21, 288 27, 977 21, 000 18, 783 37, 995 8, 230 18, 783 9, 170 6, 322 77, 742 5, 650 9, 502 10, 037 6, 984 1, 325 11, 3	70, 421 69, 520 62, 830 62, 820 62, 273 41, 940 46, 741 45, 744 45, 743 40, 369 40, 550 39, 651 33, 050 39, 651 33, 050 31, 000 30, 252 26, 401 21, 552 22, 441 31, 742 22, 433 31, 100 31, 10	14, 1218 68, 000 68, 58, 000 68, 379 68, 379 75, 1389 75, 1389 75, 256
	Total		888,531	2, 210, 859	961,508	4,060,898	33,710,551

Eighth District—1910.

Disposi	tion of out.	for blasting	on.	E	mploy	és.		Accid	lents.	solid or	Ani Un	mber of mals der	
Tons loaded on cars for shipment.	Other purposes.	Kegs of powder used for blasting coal.	Days of active operation.	Average number of miners.	All other employés.	Total.	Tons mined by hand	Killed	Injured.	Blasting coal—From undercut or both.	Horses.	Mules.	Number.
523, 811 349, 023 269, 448 2169, 448	59, 04s 3, 995 2, 852 5, 913 10, 501 3, 250 6, 927 1, 707 1, 570 1, 5	7,796 3,178 12,635 22,142 22,185 1,305 3,305 2,852 1,572 2,187 2,22 2,214 2,22 2,22 2,218 2,218 2,218 2,187 2,187 2,187 2,187 2,187 2,187 1,676 1,333	179 185 181 181 183 183 183 183 185 183 185 183 185 185 185 185 185 185 185 185 185 185	2600 2675 2775 2775 2775 2775 2775 2775 2775	2322 3717 948 42344 2244 2245 225 233 333 400 202 211 217 223 234 245 255 257 244 217 217 217 217 217 217 217 217 217 217	4922 3717 3718	51, 484 272, 443 277, 032 277, 032 277, 032 163, 344 15, 930 152, 435 105, 685 89, 699 42, 041 77, 991 77, 991 77, 991 76, 232 74, 686 75, 421 68, 352 64, 023 47, 800 40, 361 38, 045	111111111111111111111111111111111111111	3 3 2 2 4 4 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	Solid Godo Godo Godo Godo Godo Godo Godo Go			11 22 3 4 4 5 6 6 7 7 8 8 9 9 10 111 131 112 113 114 115 113 114 115 12 12 23 22 42 25 26 27 27 8 29 31 32 33 34 34 44 45 46 47 47 8 8 49 9 40 51 1 52 53 55 55 55 55

St. Clair County-

			0	utput of M	ines in T	ons.	l product.
Number.	Name of Operator.	Postoffice address of the mines.	Mine run.	Lump.	Other grades.	Total.	Aggregate value of total product.
2 3 4 5 6 7 8 9 10 11 12 13	Local Mines. Bretz & Schilling. Frank Sergent. Tower Grove Coal Co. Wm. Lattman. Coöperative Coal Co. Lebanno (Lity Coal Co. O. W. Schumacher. Wohn T. Beatt. Diamond Joe Coal Co. R. Schramm & Son Edgemont Coal Co. Emil Kramer. Philip Dietrich Thos. McBride. Fred J. Ziska. Aug, Murkoff. Total.	do New Athens Lebanon Marissa Millstadt Mascoutah Millstadt Belleville Edgemont Caseyville Freeburg do Belleville Smithton	4,524 2,146	5,684 5,000 2,000 5,183 4,844 1,070 2,820 2,051 502	1,000	26, 050 24, 000 15, 105 15, 000 7, 000 5, 200 5, 183 4, 844 4, 524 3, 216 2, 820 2, 051 1, 810 1, 202 122 140	\$26, 250 24, 750 16, 829 15, 000 7, 000 10, 750 7, 775 7, 266 6, 786 3, 483 3, 525 3, 589 2, 202 625 265 175 \$143, 580
	Total—72 mines						

Mines reported for 1909, 66. New mines, 11. Abandoned mines, 5. Mines in 1910, 72.

Shipping Mines-Recapitulation by

			Production	on of Differ	ent Grades	s in Tons.			-all
Counties,	Number of mines.	Mine run.	Lump.	Egg.	Nut.	Pea.	Slack.	Total.	Average value per ton- grades.
Randolph	10	392,763	315,879	9,019	280	104,008	9,479	831; 428	\$0.957
St. Clair	55	888,531	2,210,859	31,906	250,724	579,063	99,815	4,060,898	0.914
Total	65	1, 281, 294	2, 526, 738	40, 925	251,004	683,071	109, 294	4,892,326	\$0.921

Eighth District—Concluded.

	tion of out.	or bla	on.	E	mploy	és.		Accio	lents.	solid or	Ani	nber of mals der-	
Tons loaded on cars for shipment.	Other purposes.	Kegs of powder used for blasting coal.	Days of active operation.	Average number of miners.	All other employés.	Total.	Tons mined by hand.	Killed.	Injured.	Blasting coal—From undercut or both.	Horses,	Mules.	Number.
	26, 050 24, 000 15, 105 15, 006 7, 000 6, 000 5, 183 4, 844 4, 524 3, 216 2, 820 11, 810 502 212 212 212 140	800 120 414 414 520 208 200 150 	295 295 257 250 220 200 212 240 210 100 170 225 195 115 116	14 12 12 14 6 10 2 77 5 5 8 8 4 3 3 2 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	55. 8 4 4 1 6 2 3 2 2 2 1 1 1 1 36	19 122 20 18 7 7 16 2 9 9 8 10 6 4 3 3 1 1 2	26, 050 24, 000 15, 105 15, 000 7, 000 6, 000 5, 200 5, 183 4, 842 4, 524 3, 216 2, 820 2, 051 1, 502 2, 120 121 122, 657	i					1 2 3 4 5 6 6 7 8 9 10 11 12 13 14 15 16 17

Counties—Eighth District—1910.

Disposit Output–	ion of -Tons.	blasting	3.		Em	ployé	ės.			В	lasting Coa	ıl.
Loaded on cars for shipment.	Other purposes.	Kegs of powder for k	Days of active operation.	Miners.	Others.	Boys.	All above ground.	Total.	Tons mined—By hand.	From solid-Tous.	Undercut-Tons.	Both methods-Tons.
795,900	35,528	25,532	178	482	331	7	61	881	454, 210	427, 158	177, 223	227, 047
3,748,869	312,029	99,504	175	2,669	2,150	59	416	5, 294	2, 295, 904	2, 182, 645	1,080,633	797,620
4,544,769	347,557	125,036	175	3, 151	2,481	66	477	6, 175	2,750,114	2,609,803	1, 257, 856	1,024,667

Local Mines-Recapitulation by

,			Production	on of Differ	ent Grades	in Tons.			-all
Counties.	Number of mines.	Mine run.	Lump.	Egg.	Nut.	Pea.	Slack.	Total.	Average value per ton- grades.
Randolph	4	1,000	13,768		233	400	140	15,541	\$1.373
St. Clair	17	71,692	46, 294			5,671		123,657	1.161
Total	21	72,692	60,062		233	6,071	140	139, 198	\$1.185
Grand total	86	1,353,986	2,586,800	40,925	251, 237	689, 142	109, 434	5,031,524	\$0.928

Whole number of mines reported for 1909, 81. Number of new mines opened during the year, 11. Number of mines abandoned during the year, 6. Whole number of mines reported for 1910, 86.

All Mines-Recapitulation by

			Production	on of Differ	ent Grades	in Tons.			A11
Counties.	Number of mines.	Mine run.	Lump.	Egg.	Nut.	Pea.	Slack.	Total.	Average value per ton- grades.
Randolph	14	393,763	329, 647	9,019	513	104, 408	9,619	846, 969	\$0.965
St. Clair	72	960, 223	2, 257, 153	31,906	250,724	584,734	99,815	4, 184, 555	0.921
Total	86	1,353,986	2,586,800	40,925	251, 237	689, 142	109,434	5,031,524	\$0.928

Counties—Eighth District—1910.

Disposit Output-		blasting	1.		Em	ployé	s.			В	lasting Coa	1.
Loaded on cars for shipment	Other purposes.	Kegs of powder for k	Days of active operation.	Winers.	Others.	Boys.	All above ground.	Total.	Tons mined—By hand.	From solid—Tons.	Undercut-Tons,	Both methods—Tons.
	15,541	617	165	17		1	3	21	15, 541			
	123,657	3,530	198	105	3		33	141	123,657			
	139, 198	4,147	192	122	3	1	36	162	139, 198			
4,544,769	486, 755	129, 183	180	3,273	2,484	67	513	6,337	2,889,312	2,609,803	1, 257, 856	1,024,667

Counties—Eighth District—1910.

Disposition of Output—Tons.		blasting	1.	Employés.						Blasting Coal.		
Loaded on cars for shipment.	Other purposes.	Kegs of powder for b coal.	Days of active operation.	Winers.	Others.	Boys.	All above ground.	Total.	Tons mined—By hand.	From solid—Tons.	Undereut-Tons.	Both methods—Tons.
795,900	51,069	26, 149	174	499	331	8	64	902	469,751	427, 158	177, 223	227,047
3,748,869	435,686	103,034	182	2,774	2, 153	59	449	5,435	2, 419, 561	2, 182, 645	1,080,633	797,620
4,544,769	486,755	129, 183	180	3,273	2, 184	67	513	6,337	2,889,312	2,609,803	1, 257, 856	1,024,667

NINTH INSPECTION DISTRICT-1910.

FIFTH ANNUAL REPORT.

Counties-Franklin, Gallatin, Jefferson, Perry, Saline, Wabash, White,

OSCAR CARTLIDGE, Inspector, Benton.

Hon. David Ross, Secretary State Bureau of Labor Statistics, Springfield:

SIR—Complying with the statute of the State defining the duties of the State inspectors of coal mines, I have the honor to submit the first annual coal report of the mines in the ninth inspection district, as changed by the Board of Commissioners of Labor, at their meeting in July, 1909, but the fifth annual report of the ninth inspection district for the year ending June 30, 1910. Three counties—Clinton, Randolph, Washington—were taken from the ninth district and Wabash county added, so that the district now comprises the counties of Franklin, Gallatin, Jefferson, Perry, Saline, Wabash and White.

Mr. W. S. Burris, former inspector of this district, resigned May, 1910, and I was appointed to succeed him by Governor Deneen on the 7th of the same month. Since my appointment there has been practically no work in the mines of this district, owing to the suspension of operators, beginning April 1st, and lasting to the end of the fiscal year.

The fact that the mines were not in operation during the months of April, May and June, it was impossible, in many instances, to give the exact number of days of lost time to the men injured. Where the days lost could not be given, they have been indicated as unknown. This report contains information regarding the number of mines in operation, the number abandoned; the number of miners and other employés below and above ground; the number of mules and motors underground; the number of kegs of powder and pounds of permissible explosives used; the tons of coal of various grades produced; the fatal and non-fatal accidents that have occurred and other items pertaining to the industry.

The summary of the leading items of the report follows:

The summary of the reading items of the report follows.	
Number of counties	7
Number of new mines	7
Number of abandoned mines	10
Whole number of mines	73
Number of shipping mines	49
Number of local mines	24
Total tons of coal, all mines	6 622 666
Tons mine run	1 977 041
Tons lump	
Tons of egg	
Tons of nut	
Tons of pea	1,713,081

Tons of slack or waste	91,699
Tons loaded on cars for shipment	
Tons supplied to locomotives	63,136
Tons sold to local trade	246,718
Tons consumed or wasted at mines	
Tons mined by band	
Tons mined by machine	4,674,331
Average number of days active operation, shipping mines	
Number of motors	37
Number of machines in use	
Total number of employés	9,360
Number of miners	
Number of others underground	
Number of boys underground	119
Number above ground	810
Aggregate value of product	\$6.061.582
Number of fatal accidents	37
Number of non-fatal accidents	124
Number of tons produced to each fatal accident	179,261
Number of tons produced to each non-fatal accident	53,489
Number of employés to each fatal accident	253
Number of employes to each non-fatal accident	
Number of employes to each non-ratal accident	10

The production of coal in the counties now forming this district is shown in the following table for the years 1909 and 1910, with the increase and decrease:

Counties.	Total Product, of Coal—		Increase.	Decrease.	
	1909.	1910.			
Franklin	2,442,978	2,071,143		371,838	
Gallatin	58,218	76,692	18,474		
Jefferson	18,840	8,517		10,32	
Perry	1,536,903	1,390,436		146,46	
Saline	2,798,527	3,062,098	263,571		
White	21,210	23,780	2,570		
Total	6,876,676	6,632,666	284.615	528,62	
Net decrease				244,010	

Notwithstanding the suspension of mining operations in the district during the months of April, May and June, the decrease in the output is comparatively small, being 244,010 tons. The output, during this suspension for the district, was only 106,954 tons. This came from twelve mines; one mine each in Franklin, Gallatin and Jefferson counties and nine mines in Perry county. There was no tonnage for the three months reported from Saline county.

NEW DEVELOPMENTS AND EQUIPMENTS.

The Wilmington Star Mining Company, main office 1114 McCormick building, Chicago, has sunk a mine at West Frankfort, in Franklin county. The company commenced sinking in August, 1909, and reached coal at the main shaft in November of the same year. The escapement shaft was finished about three weeks later. The main shaft is 10 by 18 feet in the clear, timbered with 4 by 12 inch long leaf pine, with 8 by 8 inch butons and 6 by 6 inch hard maple guides. The shaft is 455 feet deep to the bottom of the coal; the seam is 9 feet and 1 inch thick. The escapement shaft is 9 by 16 feet, divided into two compartments; that for the air is 11 by 9 feet and for the stairway 4 by 9 feet. The fan is a Clifford Capell, 7 by 18 feet, directly connected to an Eric City engine, 20 by 24 inches, and has a capacity of 500,000 cubic feet of air per minute at 150 revolutions, with a three-inch

water gauge. The tipple is constructed of steel throughout, with three tracks and provisions for a rescreener and washer in connection. The ropes are one and one-fourth inch and are carried down the shaft over three-foot wheels. The boiler room is of brick, 44 by 36 feet, with four boilers installed, 150 horse power each, with room for four more boilers. The smoke stack is of fire brick, eight feet in diameter and 100 feet high. It was built by the Alphons-Custodis Chimney Company. Water is supplied to the boliers and to the fire protected area of the mine from a tank 16 by 24 feet, with a capacity of 48,500 gallons. The engine room is brick, 24 by 2 feet, and contains a pair of Danville hoisting engines, 24 by 42 inches, connected to double drums eight feet in diameter. There is also one Western Electric generator, 300 K. W., 250 volts; the belt is connected to a Vilter Manufacturing Company engine, 24 by 48 inches. The belt wheel on the engine is 36 inches by 18 feet and on the generator 42 by 42 inches. Also, there is a blacksmith and machine shop combined, which is of brick, and is 30 by 70 feet; also an oil house and a powder house, both of brick. In fact, all of the buildings are brick, with red tile roofs and are fireproof throughout. The pit cars will hold four tons, and the ultimate output is expected to reach four thousand tons in eight hours.

During the year the Hart-Williams Coal Company, Benton, Franklin county, added the following to its equipment: Six Morgan Gardner chain breast machines; two Kewanee boilers, 150 H. P., 72 inches by 18 feet, making six in all; two fifty pound Dupont trip hammers; one brick house with hot water heating plant for keeping carbonite at an even temperature all the time; one frame house for stable boss; one track 2,600 feet long, for empty cars for loading; one track 1.500 feet long, for loaded cars; one office building, brick, with both wagon and railroad scales in building; together with an oil room and two storage rooms. The oil room is provided with three two-barrel Bowser self measuring oil tanks; one wash house for employés, 85 by 35 feet, with concrete floors, equipped with steam heat, five shower baths, forty individual wash basins, two hundred steel lockers, with two compartments each, one for dirty and one for clean clothes; one private bath room, with complete equipment, and one hospital room, provided with bed, hot and cold water and a general stock of emergency medicines and supplies. This building is of brick and is fireproof throughout.

The Wasson Coal Company, Harrisburg, Saline county, has added the following electrical equipment, which is ready for operation: Two additional

boilers, 18 feet by 72 inches, both 150 H. P.; one 250 K. W. Morgan Gardner generator, 250 volts; one Skinner engine; one seven-ton Morgan-Gardner haulage motor; eight Morgan-Gardner chain breast machines, with line and other necessary material.

The Hickory Hill Coal Company, at Equality, Gallatin county, has put in a concrete arch entrance at its mine, which is a slope, and has greatly improved the appearance as well as the stability of the mine.

The Wilson Coal Company, Cutler, Perry county, has erected a new head frame 55 feet high, which is constructed of 4 by 12 inch oak timbers, securely

bolted together. The company has also built a new fan house.

The Big Muddy Carterville Coal Company's No. 7 mine at Royalton, Franklin county, has been purchased by the Franklin Coal and Coke Company. The main shaft at this mine was sunk about three years ago, but no development work was done until the new company took possession. then the escapement shaft has been put down and the underground connections made with the main shaft. A substantial wood tipple has been completed and the necessary equipment is being installed as expeditiously as possible.

The Big Muddy River Consolidated Coal Company, with main offices at Herrin, Williamson county, is now known as The Southern Illinois Coal Company. This company's mine is in the southwest corner of Franklin county and has been equipped in first-class shape and is producing a considerable tonnage. The main shaft is 347 feet deep and is 91/2 by 191/2 feet in the clear. The air shaft has a 9 by 334 foot ladder compartment and a 9 by 9 foot air chamber. The coal is 12 feet thick. A four track steel tipple has been erected; a 12 foot Stevens fan has been installed; two Atlas boilers, 150 horse power each; one Ingersoll-Rand air compressor; four puncher machines, two Ingersoll, two Sullivan, and a 24 by 42 inch Litchfield hoisting engine, which completes the equipment to date.

At West Frankfort, in Franklin county, The West Frankfort Coal Company, West Frankfort, Franklin county, began sinking a shaft at that place January 1, 1910, and found the coal 441 feet below the surface May 6 of the same year. The main shaft is 171/2 feet by 91/2 feet in the clear. escapement shaft is 424 feet to the coal and in size is 14 by 9½ feet. The shafts are 300 feet apart. On account of the strike no developments have been made except the erection of two boilers of 150 horse power each and the grading of the track spurs, which connect with the Chicago and Eastern Illinois railroad.

CHANGE OF COMPANY NAME, ETC.

The Avery Coal and Mining Company, Winkle, Perry county, is now known

as the Bald Eagle Mining Company.

The Dering Coal Company's mine No. 18 at West Frankfort, Franklin county, has been closed down since February 16, 1909, at which time an explosion occurred, killing four men and completely wrecking the mine. The shaft at that time was set on fire, and it was necessary to flood it in order to put out the flames. Since August 24, 1909, the work of reclamation has been going steadily on, and it is expected that it will be in shape to hoist coal by the fall of 1910.

The Zeigler Coal Company's mine at Zeigler, Franklin county, has been leased by the Bell & Zoller Mining Company, and hereafter will be operated under that name. No coal was produced at this mine during the year.

FATAL ACCIDENTS.

The following is a detailed account of the fatal accidents that have occurred in the ninth inspection district during the year ending June 30. 1910:

July 2. Guy Conover and J. C. Calhoun, shot firers in the Harrisburg Southern Coal Company's Nigger Hill mine at Grayson, near Eldorado, were killed by an explosion. The accident occurred in the fifth southeast entry about 8:20 p.m. This mine makes considerable gas and is very dry. They were almost through shooting and from the account given by the county mine inspector, had lighted two or more shots at the same time, resulting in an explosion of carbon monoxide and marsh gases. The force of the explosion extended over almost all of the east side of the mine. Conover was 25 years of age and had a wife and two children. Calhoun was aged 28 and left a wife and two children.

July 6, Gabe Rodonis, loader, aged 35 years, married, employed at the No. 2 mine of the Saline County Coal Company, Ledford, was killed by falling of coal from the face of his room, No. 2, fifth west south, while he was in the act of snubbing the coal. The room had been undercut with a chain breast machine and had a dirt slip, which caused the coal to be loosed. About ten tons rolled over on him, crushing him in the chest and bowels. He was a Russian and leaves a widow and three children in the old country.

July 12, Walter Stanhouse, Sr., miner, aged 53 years, married, was killed by falling top coal. He was working in the Paradise Coal Company's mine at Duquoin and was engaged in widening out an entry preparatory to putting in a parting. He had just fired a shot and was pulling down the top coal, when it gave way, killing him instantly. He leaves a widow and three

children.

July 13, John Jckettes, aged 26 years, single, employed as head cager at the O'Gara Company's mine No. 1, Harrisburg, was killed while attempting to pull a loaded car back on to the cage, without first giving the proper signal. The engineer, getting one bell, took the cage away and Jckette was precipitated forward, part of his body hanging over the cage, in which position he was caught across the middle between the cage and the wall of the shaft. He leaves a widowed mother.

July 31, John Bossoloni, miner, aged 50 years, married, working in the mine of the Zeigler District Colliery Company, Christopher, while engaged in pulling down top coal, was crushed beneath a large piece, which gave way

without warning. He leaves a widow and two grown children.

August 9, 1909, Charles Domenic, miner, aged 43 years, married, was killed by falling top coal in the Majestic Coal Company's mine at Clinch, Perry county. Deceased was engaged in drawing back pillars and top coal. At quitting time he began knocking props from under some top coal, expecting that it would be down when he returned in the morning. The coal was looser than he thought and when the props were removed it fell, burying him beneath. He leaves a widow and three children.

August 17, 1909, Parker Adkins, driver, aged 20 years, single, was killed at Rend City in the mine of the W. P. Rend Collieries Company. About 9:00 a. m. Herman Gibson, who was working near, saw a flash of light and heard a man scream. Rushing to the spot he saw the deceased lying on the wires just south of No. 1 room in the first northwest entry. Deceased had been trying to remove a sprag from the car wheel, and in some way came in contact with the wires, which were down. At the place where he was killed there was a pile of slate, some of which had fallen on the wires.

Apparently this slate had knocked the wires down.

August 17, 1909. William Yapp, miner, aged 32 years, married, working at Benton, in the Benton Coal Company's mine. Deceased, while walking through an open crosscut, tripped and fell upon a coil of live wires hanging on a prop near the rib. He was unable to extricate himself and died before assistance could reach him. He leaves a widow and one child. A curious coincidence in connection with this death is the fact that it occurred at about the same hour and from the same cause as that of Parker Adkins, described above.

August 17, 1909, Arthur Foster, machine loader, aged 21 years, single, was killed in the No. 4 mine of the O'Gara Coal Company, Harrisburg, Saline county. Foster was charging the right hand rib shot in No. 4 room off of the No. 1 room, fourth southwest, when a premature explosion occurred,

killing him instantly.

August 17, 1909, Leon Duchne, machine helper, aged 30 years, married, was killed in mine No. 9 of the O'Gara Coal Company. About 2:00 o'clock p. m. a piece of coal, which was about two feet thick, ten feet long and seven feet high, fell from the face of No. 3 room, sixth southeast, crushing him through the hips, causing injuries from which he died about 8:00 p. m. of the same day. He left a widow and two step-children.

September 7, 1909, Charles Bowers, loader, aged 18 years, single, while taking down top coal in his working place at the face of the second east entry off the second southeast in the Harrisburg Southern Coal Company's mine, Grayson, Saline county, was instantly killed by a falling rock from

the roof.

September 27, 1909, Charles H. Crest, laborer, aged 45 years, widower, was killed by falling roof in the mine of the Gallatin Coal and Coke Company at Equality. Crest went into the working place of Fred Shoemaker to clean up a fall which had occurred September 24. The roof at the time he went into the room was reported safe. About noon it was noticed by the miners that the roof was working loose and at 3:00 p. m. the fall came. He left three children.

October 6, 1909, Mike Lukis, miner, aged 35 years, married, was killed by falling roof. He was loading a car in room No. 10, first stub off the fourth northeast in mine No. 11 of the Brazil Block Coal Company, West Frankfort. A large piece of rock from the roof gave way, crushing him to the floor.

The accident happened about 9:00 o'clock a.m. His partner, who was loading on the other side of the car, said he sounded the roof when they first went to work in the morning and it appeared safe. He leaves a widow and one

October 11, 1909, William Wagoner, mine examiner, aged 28 years, married, employed at the mine of the Franklin County Collieries Company, Sesser, was burned by gas so severely that he died. Deceased was in the habit of carrying an open light on his head and a safety lamp in his hand while making his examinations. On this occasion he was examining the second main southeast entry, which was only in about fifty feet. Before entering the place he was in the act of removing the light from his head, intending to leave it outside on the track, but the gas extended out farther than he thought and was ignited. He left a widow and one child.

October 22, 1909, Henry C. Cook, pumpman and car coupler, aged 41 years, married, working in the mine of the Big Muddy Carterville Coal Company at Royalton. Deceased was caught between a car and the rib in the runaround, while attempting to couple some cars, and was injured so that he

died a few hours later. He leaves a widow and one child.

November 4, 1909, Tony Regis, driver, aged 24 years, married, was killed in the United Coal Mining Company's mine at Christopher, Franklin county. Deceased was riding on the front end of a loaded car, when it jumped the track, and he was pinioned between the car and the rib. He leaves a widow and two children.

November 10, 1909, Warren Lynch, machine helper, aged 37 years, single, whose home was in Carbondale, Ohio, but was working in the No. 11 mine of the O'Gara Coal Company, Eldorado, Saline county, was killed by falling coal from the face of No. 12 room, second east off the straight south. Deceased was working on the front end of a machine, when a piece of coal about eight feet long, four feet wide and twenty inches thick, fell out of the face on to him, crushing him in the bowels, from which injury he died in about three hours.

November 20, 1909, Arthur Hampton, driver, aged 25 years, married, working in the No. 1 mine of the W. P. Rend Collieries Company, Rend City, Franklin county. Deceased was coming out of the third southwest entry on to the main west entry and at the same time the driver in the main west was passing. Fearing that the main west driver would run into him, he jumped from the car and was squeezed between the car and rib. Three ribs were broken, his chest crushed and his left hip badly bruised. He died the morning of the next day, leaving a widow, who was dependent upon him

November 21, 1909, Andrew Mitchell, mine examiner, aged 51 years, married, employed at No. 11 mine of the Brazil Block Coal Company, West Frankfort. Deceased was burned to death by an explosion of gas in the sixth southeast entry. This mine employs two examiners, and on this day Mitchell and the other examiner, Frank Kane, were hanging a curtain in a cross-They knew the place was throwing off considerable gas and were working with safety lamps. Not being able to see to drive a nail, Mitchell opened his lamp and handed it to Kane to hold. Instantly there was a terrific explosion. Mitchell was burned internally and died two days later. Kane eventually recovered. Mitchell leaves a widow and four children. November 26, 1909, Thomas Smith, aged 26 years, and Andy Nelson, aged

34 years, shot firers in the Harrisburg Southern Coal Company's mine at Grayson, Saline county, were killed by afterdamp from a blown out shot, which was caused by the excessive use of powder and the firing of an impracticable shot in No. 1 room, first east off the second southeast. Both bodies were found at room No. 16, second southeast. The first and second southeast entries were badly wrecked. Doors were blown down, forty-five stoppings knocked out and part of an overcast destroyed. Forty-nine shots had been fired on the west side and twelve on the east side, making a total of sixty-one shots which had been fired within forty-five minutes. Both men were married. Smith leaves a widow and four children; Nelson, a widow and one child.

December 19, 1909, Joe Clerico, timberman, aged 50 years, married, was at work timbering the main west parting in W. P. Rend Collieries Company's mine No. 1, Rend City, when slate fell from the cross bars, knocking him down and pinning him underneath. He died from the injuries on the morning of December 22, 1909. He had five ribs fractured, one ear badly cut, three scalp wounds and a cut on the neck. He leaves a widow and five children, two of them adults.

January 6, 1910, Louis Lindsey, top laborer, aged 32 years, married, employed by the Strat Coal Company, Pinckneyville, Perry county, was killed by falling down the shaft. He had left the gate open and attempted to put an empty car on the landed cage. The car took the wrong switch, and the gate being open, fell down the shaft, dragging Lindsey with it. He left a

widow and one child.

January 17, 1910, Enrico Matioda, miner, aged 25 years, single, was killed at Willisville, Perry county, in the mine of the Missouri and Illinois Coal Company. Deceased had pushed a car into his room and was walking around it to begin loading, when a piece of slate fell from the roof, striking him on the head, killing him instantly. The accident occurred in room No. 2 on the ninth south off of the straight east entry.

January 21, 1910, John Conred, loader, aged 48 years, married, lost his life in the No. 1 mine of the O'Gara Coal Company at Muddy, Saline county. The coal had been cut half an hour before, and deceased went into the room to block and get the place ready for shooting. While so engaged about ten tons of the face came over on him, killing him instantly. He leaves a widow

and one child.

February 22, 1910, Leon Roberts, driver, aged 25 years, married, employed in mine No. 1, W. P. Rend Collieries Company, Rend City, Franklin county, was killed while going in the fifth southeast entry with an empty car, which collided with an empty car left on the track the previous trip, and which the loader had failed to push into his room. The accident occurred about 1:30 p. m. and he died at 9:15 p. m. He was a widower with one child. February 26, 1910, Isham Bowlin, shot firer, aged 30 years, married, em-

February 26, 1910, Isham Bowlin, shot firer, aged 30 years, married, employed at the mine of the United Coal Mining Company, Christopher, Franklin county. Deceased, when entering a room to fire the shots, ignited a pocket of gas, receiving burns from which he died the next day. He left a

widow and two children.

May 6, 1910, Charley Pugh, topman, aged 28 years, married, employed at the Franklin Coal and Coke Company's mine at Royalton, came to his death by falling down the shaft. He was working on the bottom part of the cage and had put some boards across the shaft on which to stand. One of the boards broke, precipitating him into the shaft, which is about 350 feet deep.

In the report of last year of State Inspector W. S. Burris of this district a detailed account was given of a gas explosion occurring January 10, 1909, in the Zeigler Coal Company's mine at Zeigler, killing twenty-six men. this number the bodies of Edwin Elkins, colored; Robert Fuller, colored; Joe Toth or Tate, Hungarian; John Phillips, Hungarian; Gaul Magoula, Hungarian; Tom Hubbard, colored, and Finis Woolfolk, colored, were not recovered July 1, 1909, and were so reported by Mr. Burris. Neither was the body of Lawson Farmer recovered, who lost his life in another explosion in the same mine February 9, 1909, when three men were killed. account of these explosions was given by Mr. Burris in the twenty-eighth annual Coal Report. This mine was sealed February 10, 1909, and remained sealed until May, 1910, when it was leased by the Bell and Zoller Mining Company, who at once began the recovery of the mine. On July 20, 1910, the bodies of all of the above named, excepting Hubbard and Woolfolk, were taken from the mine. These two bodies were recovered October 2. 1910, bringing to a close a series of accidents unprecedented in the history of Illinois mining. Respectfully submitted,

OSCAR CARTLIDGE.

Fatal Casualties—Ninth District—July 1, 1910.

Date.		Name.	Age.	Occupation.	Residence. (Town.)	Married.	Single.	Widow.	Children.	Dependents.	Cause of Accident.
July Aug. Sept. Oct. Nov. Dec. 1910 Jan. Feb.	2 6 12 13 31 9 17 17 17 17 27 6 11 20 21 26 26 19 17 21 22 26	J. C. Calhoun. Gabe Rodonis. Walter Stanhouse, Sr John Jokettes. John Bossolomi Charles Domenie Parker Adkins William Yapp. Arthur Yoster. Charles H. Crest. Mike Lukis. William Wagoner. Henry C. Cook William Wagoner. Henry C. Cook Tony Regis. Warren Lynch Andrew Mitchell Thomas Smith Andrew Mitchell Thomas Smith Andrew Nelson. Joe Clerico. Louis Lindsey. Enrico Matioda. John Courad. John Cour	28 35 53 26 50 43 20 32 21 30 8 45 35 28 41 24 37 25 51 26 32 27 32 27 28 29 31 29 32 32 32 32 32 32 32 32 32 32 32 32 32	.do. Loader. Miner Cager Miner Cager Miner .do. Driver Machae helper. Laborer Miner Miner Miner Miner Miner Miner Miner Miner Mine examiner Pump man Driver Mach, helper Driver Mine examiner Shot firer .do. Timberman Laborer Miner Miner Miner Mine examiner Shot firer Laborer Miner Laborer Miner Laborer Laborer Laborer	.do Ledford. Duquoin. Harrisburg. Christopher. Duquoin. Mulkeytown. England Harrisburg. N Pittsburg. N Pittsburg. V W. Frankfort. Sesser. Royalton. Christopher. Carbondale, O. Rend City. W. Frankfort. Grayson. do. Rend City. Finckney ville. Willisville. Muddy. Muddy. Hinckney ville. Willisville. Muddy. Kopyalton.		i i i i i i i i i i i i i i i i i i i	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	2333311112241112	3 4 4 1	Afterdamp, blown out shotdododododododo
	į	Total				23	6	21	42	58	

Recapitulation of Fatal Casualties—Ninth District—1910.

Residence.	No.	Occupation.	No.	Cause of Accident.	No.	Colliery.	No
Carbondale Christopher Duquoin England Equality Grayson Harrisburg Ledford Muddy Muddy New Pittsburg Pinckneyville Rend City Royatan Verantion Total	3 2 1 1 4 4 4 1 1 1 1 1 3 2 1 1	Cager . Drivers . Laboreres . Laboreres . Loaders . Mach , helpers . Mine examiner . Pumpman . Shotifiers . Timberman . Topman .	4 2 4 2 2 6 1 5 1	Afterdamp. Cage ascending. Electric wire. Falling coal. Falling gown shaft. Falling roof. Falling slate. Gas explosions. Prit cars. Premature blast.	1 2 7 2 4 1 3 4	Benton Big Muddy-Carterville Brazil Block Franklin Franklin Franklin Franklin Gullatin Harrisburg South Majestic Missouri & Illinois O'Gara Paradise Rend Strait United Cupited Cupite	

Non-Fatal Casualties—Ninth District—July 1, 1910.

Date.	Name.	Age.	Residence. (Town.)	Married.	Single.	Children.	Dependents.	Character of Injury and Cause of Accident.	Time lost—days.
1909	Toronk Double of	1	H					m	
July 6 9 11	Joseph Ruddock Matthew Hawthorn J. C. Lewis	65 27	do Christopher	1 1		1	1	Toe cut off, falling slate Leg broken, falling coal Back, ribs and hips injured,	46 85
18	W. Fulkerson	17	Ledford		1			falling coal Hip dislocated, falling slate	77 *
	John Dawson							Face and arms burned, gas ignited	67
22	O. Waus	30	Harrisburg		1			Slate Collar bone broken, pit car	64 40
23	Harvey Jacobs Golin McFadden	17	Rend City		1			Jaw broken, teeth knocked out,	30 51
Aug. 31	Ed. Lohrmann DeWitt Hale	20 50	Benton Pinckneyville		1			falling slate	60 180
4	reter McGillins	30	Eldorado	1		4		Leg broken, falling slate Back and leg injured, falling slate	120
	Edward Anderson Jesse Moore			1	1		1	Ankle dislocated, falling coal and slate	33
9	Lou Blankenship		Eldorado	1		6	7	Hip dislocated, falling slate	31 †
	John Vraille			1	• •	2	3	Hip and back injured, falling coal	92
15	Charles Edwardson	28	Ledford	1			1	car Hip dislocated, cage	65
21 24	Ed. Meredith	$\frac{24}{32}$	W. Frankfort Ledford	1		1 3	2	Hip bruised, pit car Eyes destroyed, both, prema-	33
	John Siko			1	٠.	5	6	ture blast	† 42
28 28	W. Evans. George Zans.	::	Eldorado Ledford	1		5 ††	6 ††	Shoulder injured, falling clod	36 30
Sept. 2	George Zans. Mike Stankovich. Morgan Davis.	50	do Wasson	i			···i	Leg broken, falling slate Head cut, leg, back injured, falling slate	‡ 60
3	Royal Snyder	24	Ledford	i	1	3	4	Foot injured, falling coal	37
3	Logan Stevers	18	do		1	••••	1	pick	33 40
- á	Domeneck Frego	30	Wasson		1 1			Leg injured, pit car Leg and hand cut, falling slate Toes crushed, pit car	60 42
7 9	William Glassey Frank Raymondo John Lee Charles Laxbon	30 20	Willisville W. Frankfort	1		1	2 1	Back bruised, falling slate Arm hurt by mule Foot broken, falling coal	31 103 *
11	W. J. Pygott	50	Sesser	1	• •	· 1 6 3	7	Arm broken, railroad coal car Toe broken, falling coal	115
14 17	George Wilkins	19	Ladford		ĭ 1			Leg broken, pit car. Toe mashed, pit car. Arms burned, gas ignited.	92 32
22 23 25	Charles McNiel	23 23	Harrisburg Eldorado	1	ì	2		Arms burned, gas ignited Ribs broken, pit car Leg broken, falling slate	44 35 *
25 25	Steve Roroughi	٠-	Todford	1		1 2	2	Jaw broken, kicked by mule	42 *
28 30	John Wright Dennis McCabe Sylvester Guitziana	30 27	Christopher		i		2	Leg broken, kicked by mule Leg cut off, chain machine Shoulder dislocated, gate falling	*
Oct. 4	James Davis	40	Ledford	1		6	7 5	from tipple	50 34
9 10	Homer Brown		do Muddy	1	i			Leg broken, pit carLeg broken, falling slate	38
							††	Face and hands cut, premature blast	35 †
16 19	John Bolo	24 32	Benton Harrisburg	1			1 1	Leg broken, pit car Hips crushed, falling coal	90 ± 38
22	Owen Haley		do		1			Leg and foot injured, falling coal	38

Non-Fatal Casualties-Ninth District-Continued.

Date.	Name.	Age.	Residence. (Town.)	Married.	Single.	Children.	Dependents.	Character of Injury and Cause of Accident.	Time lost-days.
								Collar bone and ribs broken,	90
Nov. 1	Fred White	19 44	do Muddy	i	1	4	···· 5	pit car	120 34
29 29 29	Robert Gibson Joe Tomkavich Lewis Fodouished Hawle State Hawle State George Williams Mike Sumbo Frank Kane Franest Bridgewater Victor Plasters Peter Fescio Ed. Logston Andy Sarko Sylvester Thorn Jake Humick Bert Irwin John Tuliny Lon Keller Frank Golden Heury Glidewell J. H. Wells	29	W. Frankfort Benton	1	i	i	1 7 5 2 2	leg broken, falling coal. Anke it haved, falling coal. Anke it haved, falling coal. Anke it haved, falling coal. Leg injured, pit car. Collar bone broken, pit car. Hijs nipured, pit car. Hijs pruised falling slate. Body burned, gas ignited. Foot broken, falling slate. Foot broken, pit car. Foot broken, pit car. Leg broken, tail chain. Ankle disjocated, pit car. Leg broken, tail chain. Arm broken, falling slate. Arm broken, falling slate. Foot broken, pit car. Leg broken pit car. Leg broken pit car. Leg broken pit car. Legs and abdomen injured, kicked by mule. Back bruised, falling coal.	\$\frac{1}{4}\$ \$\frac{1}{3}\$ \$\
1910	Joe Nail							Leg broken, falling coal Finger broken, head bruised, falling slate	‡
11 12	Luther Foster. John Kelley. Oscar Feaquay. Heck Jones. Thomas Biama.	45 20 36	Eldorado Benton	1 1		2	3	Foot broken, turning over rock. Toes crushed, falling coal. Leg and foot hurt, fell off car Ribs and abdomen injured, kicked by mule. Leg broken, internal injured falling slate	55 90 40
	Mat Hutchcroft		_				1	Jaw broken fell on belt and pulley	‡ 40
Feb. 2	R. M. Griffith. Eulis Sullivan. Joseph McIntosh. Ebb Pullom Charles Coe	18 32 29 27	Harrisburg do Benton	1		2	3	2 Bôdy burned, premature shot. Toes mashed, pit car. 3 Head fractured, falling coal. Finger broken, falling slate. Collar bone and ribs broken, pit car.	60
13 11 14 14 15 15 16 17 18	Horace Williams James Rainey John Rainey Frank Furno Joe Johnson Clem Fletcher Tom McDermott John Goetz John Goetz J G Smith Nick Bruno Albert Abney John Murphy	27 33 28 42 38 25 42 33 19 30 39 31 18	Harrisburg Benton Sesser. Duquoin Wasson Harrisburgdodo Duquoin Sesser Pinckneyville Carrier Mills. Benton	. 1	i i	1 3 3 4	1 2 4 4 4 1 1 1 2 2 8 1 1 1	Leg broken, falling slate. Hips crushed, pit ear. Leg broken, pit ear. Leg broken, pit ear. Leg broken, pit ear. Ribs broken, pit ear. Ribs broken, pit ear. Leg broken, falling slate. Leg broken, falling slate. Leg broken, railroad coal ear. Legs broken, falling coal. Legs broken, falling coal. Legs broken, falling coal. Legs broken, falling coal. Body burned, premature blist, Foot cut off, pit ear. Back, hips and internally in-	60 30 35 180 35 180 35
21 25	Clyde Clifford John Geddo	19	Equality Christopher	.]		3	3	jured, cage 2 Wrist sprained, trap door 3 Body and arms burned, gas ignited	33
	Orlie Gruthers							Hands and arms burned, gas	35 120
28	Harry House Henry Knox	29	Sesser	i			1 7	Leg broken, falling slate Ribs broken, motor	30

Non-Fatal Casualties—Ninth District—Concluded.

Date.	Name.	Age.	Residence. (Town.)	Married.	Single.	Children.	Dependents.	Character of Injury and Cause of Accident.	Time lost—days	
2 3 4 5 6 7 10 11 12 15 15	John Reynolds Walter Stevens Ed. McIntosh Jesse Bivins.	35 26 24 47 19 27 31 26 22 28 35 45	Unknown. Harrisburg. Eldorado. Ledford. Harrisburg. Carrier Mills. Rend City. Harrisburg. Christopher. Eldorado. Ledford. Wasson.	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	2	3	Leg broken, dumped in chute by engineer Ribs broken, falling slate. Fingers mashed, pit car. Head and side cut, premature shot. Hips squeezed, falling slate.	35 39 40 54 75 40 60 60 40 90 42 ‡	
† Pe ‡ Da	* Not returned to work, S. † Permanently injured, 2. ‡ Days lost unknown, 25. † Children or dependents not known, 4.									

^{##} Married or single not known, I. Total number of men injured.....

Total number of men injured. Not recovered, nor returned to work. Number not reported as to tine lost.	$124 \\ 10 \\ 25$
Number recovered and reporting time lost =	89
Total time lost by men recovered—days. 5 Average time lost by men recovered, etc.—days 5	,06 6.6

Recapitulation of Non-Fatal Casualties—Ninth District—1910.

Residence.	No.	Occupation.	No.	Cause of Accident.	No.	Colliery.	No.
Benton. Carrier Mills. Carrier Mills. Christopher Duquoin. Eldordo. Equality. Harrisburg Ledford Muddy. Pinckneyville. Rend City. Sesser. W. Frankfort. Willisville. Unknown	3 8 4 18 1 23 20 10 3 3 4 7 4 2	Cagers. Car coupler. Car dropper. Car trimmers. Car dropper. Car trimmers. Eng. diagrope. Eng. diagrope. Laborers. Loaders. Mach, helper. Mach, helper. Mach, runner. Mach, runner. Mach, runner. Miner sammer. Miner sammer. Miners. Spragger. Timberman. Trappers. Unknown.	1 2 35 1 1 3 6 1 7 7 2 1 1 48 1 3 3 1 1 3 3 5 1 1 1 3 1 1 1 1 1 1 1 1	Cage Chain machine Coal failing down sh'ft Failing clod Failing coal Failing gate Failing slate Failing slate Fell down shaft Fell into chute Fell off car Fell onto belt Gas ignited. Mule, kicked by Pick Pit cars. Premature blast Railroad cars. Raok turning over Tail chain. Trap door.	1 1 1 222 1 29 1 1 1 1 1 37 6 2 2 1 37 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	Benton Coal Co. Bessmer Washed Coal Co. Bessmer Washed Coal Co. Brazil Bloek Coal Co. Franklin Co. Coal Co. Gallatin Coal Co. Hart-Williams Coal Co. Wissouri-Illinois Coal Co. O'Giara Coal Co. Prandise Coal Co. Rend Coal Co. Strait Coal Co. Strait Coal Co. Wassouri-Blook Strait Coal Co. Zeigler Dist. Coal Co. Zeigler Dist. Coal Co.	2 4 4 1 8 2 60 4 3 13 13 5 9
Total	124		124		124		124

Recapitulation of Non-Fatal Casualties, Nature of Injuries, Conjugal Relations and Time Lost—Ninth District—June 30, 1910.

Nature of Injuries.	Number.	Married.	Single.	Children.	Dependents	Time los	st—days. Average.	Percent- age of injuries.
Ankles dislocated Ankles injured. Arms broken Arms broken Arms injured. Arms injured. Bodies burned. Collar bone broken. Eyes destroyed Face and arms burned. Feet injured. Feet injured Foot cut off. Hands burned. Heads injured Heads injured. Hips dislocated Hips injured. Legs broken* Leg broke	2 3 5 5 2 6 6 1 3 3 8 4 1 1 3 3 3 3 7 3 3 8 2 8 1 9 9 7 7 1 2 2 1 3 3 3 6 6 1	1 2 3 2 5 4 1 1 2 6 4 4 1 1 3 2 6 2 1 5 4 1 1 2 2 1 2 2 1 2 2 1 2 2 2 2 2 2 2 2	1 1 2 1 5 5 1 2 2 1 1 1 1 1 1 1 2 1 7 3	7 13 3 11 16 2 2 3 3 6 6 12 4 4 	1 9 16 5 16 20 3 3 4 4 8 8 18 7 7 1 1 1 4 4 8 12 7 31 1 16 13 13 14 4 2 2	101 99 89 147 343 148 387 136 334 30 35 95 95 95 93 930 86 87 40 86 86 81 133 148 81 81 81 81 81 81 81 81 81 81 81 81 81	50 33 33 38 18 18 57 57 57 36 45 42 42 7 7 35 32 32 32 34 43 31 33 33 33 33 33 33 33 35 57 57 57 57 57 57 57 57 57 57 57 57 57	1.61 2.42 4.03 1.01 4.84 3.23 4.84 0.81 2.42 6.45 3.23 0.88 0.88 2.42 2.42 2.42 2.47 0.81 7.22 1.77 0.81 1.61 0.80 2.42 4.84
Total	124	77	46	145	214	5,062	57	100.00

^{*} Married or single not known.

Franklin County-

			Out	Output of Mines in Tons.						
Number.	Name of Operator.	Postoffice address of the mines.	Mine run.	Lump.	Other grades.	Total.	Aggregate value of total product.			
2 3 4 5 6 7 8	SHIPPING MINES. United Coal Mining Co., No. 1. Benton Coal Co., No. 1. Zeigler Dist. Colliery Co., No. Mine. Franklin Co. Colliery Co., No. 1. Brazil Block Coal Co., No. 11. Hart-William Coal Co., No. 11. W. P. Rend Colliery Co., No. 1. Big Muddy-Carterville C. Co., No. 1. Carroll & Franklin Co. Co. C., No. 1. Southern Illinois C. & C. Co., F. R Total—10 mines.	Benton Christopher Sesser W. Frankfort Benton Rend Royalton Hanaford Herrin	29, 583 16, 847 9, 642 20, 300 8, 682 6, 227 27, 695	5, 281 6, 297	268,716 224,914 202,548 221,683 142,405 172,275 132,865 19,910 22,328 7,527 1,415,171	374, 272 332, 127 301, 269 294, 148 255, 805 232, 777 181, 079 57, 238 27, 609 14, 819	285, 508 255, 805 209, 499 181, 079 57, 238 29, 000 14, 819			

Mines reported for 1909, 11. New mines, 1. Abandoned mines, 2. Mines in 1910, 10.

Ninth District—1910.

Disposit Outp	ion of ut.	or blasting	on.	E1	mployé	is.		Accid	ents.	solid or	Number of Animals Under- ground.		
Tons loaded on cars for shipment.	Other purposes.	Kegs of powder used for blasting coal.	Days of active operation.	Average number of niners.	All other employés.	Total.	Tons mined by hand.	Killed.	Injured.	Blasting coal—From undercut or both.	Horses.	Mules.	Number.
368, 509 309, 157 291,036 285, 508 248,405 222,273 175,563 52,493 24,965 10,778	5,763 22,970 10,233 8,640 7,400 10,504 5,516 4,745 2,644 4,041	400 4,009 4,323 2,373 7,623 1,167 1,960 2,420 400 235 24,910	200 192 195 204 193 151 200 146 183 168	30 16	372 351 267 331 210 181 223 35 70 22 2,062	402 391 326 331 421 310 223 88 190 38	53, 089 103, 669 226, 077 57, 238 7, 609 5, 187	2 2 4 1	5 5 3 4 4 4 8 3	do U. C Both U. Cdo Solid Bothdo			1 2 3 4 5 6 7 8 9

Gallatin County-

			Ou	itput of M	Mines in '	al product.	
Number.	Name of Operator.	Postoffice address of the mines.	Mine run.	Lump.	Other grades.	Total.	Aggregate value of total product.
1 2	SHIPPING MINES. Gallatin C. & C. Co., No. 1. Hickory Hill Coal Co.		16,582 567	13, 239 9, 492	22, 586 6, 549	52, 407 16, 608	\$53,037 16,342
	TotalLOCAL MINES.		17,149	22,731	29,135	69,015	69,379
2 3 4 5 6	J. O. Baldwin Josh Anderson R. J. Mitchell Reid & Brice Robert Gulley Sam Black J. P. Strong.	do Shawneetown Saline Mines Equality Junction		2,700 2,400 426 400 480	200 201 160 40 40 10	2,900 2,400 627 560 520 520 150	3,510 3,000 777 680 650 780 225
	Total		600	6,426	651	7,677	9,622
	Total—9 mines		17,749	29, 157	29,786	76,692	79,001

Mines reported for 1909, 14. Abandoned mines, 5. Mines in 1910, 9.

Jefferson County-

_			Ou	Output of Mines in Tons.						
Number.	Name of Operator.	Postoffice address of the mines.	Mine run.	Lump.	Other grades.	Total.	Aggregate value of total product.			
1	SHIPPING MINES. T. G. Watts	Mt. Vernon	1,200	3,885	3,400	8,485	10,606			
1	Sopha A. Shelton	Opdyke	32			32	64			
	Total—2 mines		1,232	3,885	3,400	8, 517	10,670			

Ninth District—1910.

Disposit Outp	ion of out	or blasting	on.	Eı	mployé	s.		Accid	lents.	solid or	Num O Anii Uno grot	f nals ler-	
Tons loaded on cars, for shipment.	Other purposes.	Kegs of powder used for blasting coal.	Days of active operation.	Average number of miners.	All other employés.	Total.	Tons mined by hand.	Killed.	Injured.	Blasting coal—From underent or both.	Horses,	Mules.	Number.
41,531 16,608 58,139	10,876	2,557 821 3,378	184 152 168	66 17 83	35 8 43	101 25 126	52, 407 16, 608 69, 015	1	1	Solid			1 2
	2,900 2,400 627 560 520 520 150 7,677	50	180 100 100 25 160 300 125	4 6 3 5 3 1 2 	1 2 1	5 8 3 5 4 1 2	2,900 2,400 627 560 520 520 150 7,677			do			1 2 3 4 5 6 7
58, 139	18,553	3,837	147	107	47	154	76, 692	1	1				

Ninth District—1910.

Disposit	ion of ut.	or blasting	on.	Eı	mployé	is.		Accid	lents.	solid or		f mals der-	
Tons loaded on ears for shipment.	Other purposes.	Kegs of powder used for blasting coal.	Days of active operation.	Average number of miners.	All other employés.	Total.	Tons mined by hand.	Killed.	Injured.	Blasting coal—From undercut or both.	Horses.	Mules.	Number.
800	7,685	= = 196	151	20	15	35	8, 485			Solid			1
800	7,717	196	86	22	17	37	8,517						

Perry County—

-							4
			Ou	tput of M	dines in '	Γons.	l produc
Number.	Name of Operator.	Postoffice address of the mines.	Mine un.	Lump	Other grades	Total.	Aggregate value of total product.
	SHIPPING MINES.						
2 3 4 5 6 7 8 9 10 11 12 13	Majestic C. & C. Co. Majestic. Paradise Coal Co., Paradise. Duquoio Operating Co., Queen. W. Missouri & Illinois C. Co., No. 4. Willis C. & M. Co. No. 1. Bald Eagle Mining Co., B. E. Brilliant C. & C. Co., Hom. Johnson-Allen Coal Co., No. 1. St. Louis-Coulterville C. Co., Vulcan. Tamaroa & L. Muddy Coal Co. Bailey Bros. Coal Co., No. 3. Diamond Fuel Co., Diamond. Duquoin Coal Co., No. 3. Richey Coal Co., No. 3. Richey Coal Co., No. 3. Wilson Coal Co., No. 3. Strait Coal Co. Strait Coal Co.	Duquoin Clinch Pinckneyville Pinckneyville do Willisville do Uuquoin Cutler Tamaroa Sunfield do Duquoin do Duquoin Coulterville Tamaroa Sunfield Tamaroa Coulterville Coulterville Finckneyville	41,344 22,839 144,610 119,479 17,120 54,096 8,564 5,993 3,000 9,618 8,856 6,603 2,413 3,000	20,877 30,348 12,387 7,075 2,000 2,615	104,539 103,956 67,191 26,680 41,815 10,128 14,130 3,152 7,193	3,000	234, 793 198, 404 132, 543 140, 000 137, 380 119, 479 67, 032 67, 707 50, 218 44, 136 22, 539 14, 598 12, 896 9, 137 9, 400 6, 603 5, 105 2, 700
	TotalLocal mines.		447,535	379,937	557,338	1,384,810	1,274,670
2	John Anderson J. T. Schneider B. O. Cook A. S. Redfern House Mine	Duquoin. Pinckneyville. St. Johns.	1,023 580	1,100 1,822	485	1,600 2,307 1,023 580 116	2,025 3,794 1,535 870 200
	Total		1,719	$==\leftarrow$	985	5,626	
	Total—23 mines		448, 254	382,859	558,323	1,390,436	1,283,094

Mines reported for 1909, 23. New mines, 1. Abandoned mines 1. Mines in 1910, 23.

Ninth District-1910.

Disposi Out _l		r blasting	-	E	mploy	és.		Accio	lents.	solid or	Ani	nber of mals der-	
Tons loaded on cars for shipment.	Other purposes.	Kegs of powder used for blasting coal.	Days of active operation.	Average number of miners.	All other employés.	Total.	Tons mined by hand.	Killed.	Injured.	Blasting coal—From sundercut or both.		Horses.	Number.
117, 810 197, 802 144, 934 112, 674 113, 674 119, 479 68, 979 39, 102 46, 896 45, 893 25, 617 14, 009 10, 583 9, 000 5, 834 6, 343 5, 124 2, 000	149,000 22,647 11,000 35,831 1,178 5,501 3,500 7,200 3,207 900 2,151 1,600 618 3,002 260 584 1,000	8, 098 3, 800' 4, 306' 5, 300 1, 442 1, 897 2, 135 2, 185 2, 420 1, 807 1, 907 1, 907 245 100 240 240 210	144 135 155 181 205 138 155 139 176 134 71 117 70 219 100 158 150	328 1360 1500 1600 100 65 75 60 300 30 40 122 	777 141 600 58 156 1922 157 36 344 255 26 144 17 15 8 21 2 19 1,058	405 277 2100 218 156 192 262 136 80 86 44 44 53 55 200 21 8 199 2,361	266, S10 127, S81 157, 934 148, 505 55, S50 62, 692 54, 096 49, 042 26, 517 16, 220 12, 193 9, 618 5, 850 5, 708 3, 000 1, 002, 920	1		Solid Both Solid do U. C do Both Solid do			1 22 3 4 4 5 6 6 7 8 9 9 101 11 12 13 14 15 16 17 18
	1,600 2,307 1,023 580 116 5,626	80 50 40 28 3	200 150 75 110 29	4 4 8 2 2 2	2	10 2 2 2 2	1,600 2,307 1,023 580 116 5,626			do do do			1 2 3 4 5

Saline County-

			Ou	tput of M	lines in	Γons.	al product.
Number.	Name of Operator.	Postoffice address of the mines.	Mine run.	Lump.	Other grades.	Total.	Aggregate value of total product
	SHIPPING MINES.			'		1	
2 3 4 5 6 7 8 9 10 11 12 13 14	O'Gara Coal Co., No. 9. Saline Co. Coal Co., No. 2. O'Gara Coal Co., No. 3. O'Gara Coal Co., No. 4. O'Gara Coal Co., No. 10. O'Gara Coal Co., No. 10. O'Gara Coal Co., No. 11. Wasson Coal Co., No. 1. Eldorado Coal Co., No. 1. Eldorado Coal Mining Co. No. 10. O'Gara Coal Co., No. 11. O'Gara Coal Co., No. 11. O'Gara Coal Co., No. 11. O'Gara Coal Co., No. 15. Do'Gara Coal Co., No. 15. Do'Gara Coal Co., No. 15. O'Gara Coal Co., No. 15. Do'Gara Coal Co., No. 15. O'Gara Coal Co., No. 12. Galatia Coal Co. Davenport Mining Co.	Ledford Harrisburg do Ledford Harrisburg Ledford Harrisburg Ledford Harrisburg Ledford Carrier Mills Eldorado Carrier Mills Harrisburg Carrier Mills Carrier Mills Carrier Mills Carrier Mills Carrier Mills Carrier Mills	33,391 8,302 22,924	280. 485 155, 301 246, 671, 62, 434 111, 185 2, 546 118, 502 32, 729 20, 957 46, 637 9, 089 21, 759 15, 114 21, 780 26, 135	149, 441 196, 107 101, 092 32, 777 135, 017 66, 698 101, 547 99, 882 104, 089 45, 825 7, 587 11, 759 21, 074 23, 447 15, 443 2, 106 1,113,900	432, 566 423, 257 401, 657 285, 015 254, 686 247, 575 220, 181 190, 723 132, 067 98, 670 96, 670 96, 579 69, 579 69, 579 41, 578 22, 924 2, 106 3, 055, 065	\$310, 095 387, 244 288, 632 210, 190 188, 348 192, 907 167, 945 171, 581 119, 003 103, 890 77, 818 70, 984 65, 403 43, 529 41, 027 24, 000 1, 700
	LOCAL MINES.						
2 3 4 5 6 7 8	Jobe Ingram Glass & Morman Tom Osborn S. J. Moore J. W. Imboden & Son Evart Clark Willis Henson John Ward John Yates John Rard Marggie Hart.	do Eagle Cquality do Mitchellville Harrisburg Mitchellville Equality -do do	2,816 325 173 60 48 40 32 32 32	275		2,816 325 275 173 60 48 40 32 32 32	4,300 3,520 406 345 263 105 80 70 32 40 40
	Total—28 mines		3,558 773,379	2, 175 1,173,519		7,033 3,062,098	9,201 \$2,473,518
			1.5,010	-,	1-,3,200	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,

Mines reported for 1909, 25. New mines, 1. Abandoned mines, 1. Mines in 1910, 28.

Ninth District—1910.

Disposit Outp	tion of out.	for blastin	ion.	Е	mploy	és.		Accid	lents.	solid or	Nun Anii Un- grou	f mals der-	
Tons loaded on cars for shipment.	Other purposes.	Kegs of powder used for blasting coal.	Days of active operation.	Average number of miners.	All other employés.	Total.	Tons mined by hand	Killed.	Injured.	Blasting coal—From undercut or both.	Horses,	Mules.	
427, 308 417, 758 393, 616 207, 909 242, 498 243, 630 216, 786 156, 678 129, 761 94, 290 92, 909 80, 224 68, 252 43, 529 39, 799 18, 000 2, 071 2, 965, 018	5, 258 5, 499 8, 041 17, 106 12, 188 3, 945 2, 306 4, 380 3, 493 2, 326 1, 327 10, 000 1, 779 4, 924 35	3,877 4,515 3,298 2,499 2,077 3,684 2,196 9,596 1,911 3,400 761 1,147 921 649 612 9188 157 42,018	194 224 209 181 202 188 193 212 220 216 133 115 103 103 132 25	28 115 76 15 10 30 32 306	480 322 477 359 301 1299 328 36 181 34 197 209 189 128 128 19	480 322 477 359 301 327 328 151 110 197 224 189 198 48 51	9.567	1 2	13 6 7 10 10 8 9	Both. U. Cdo. Both. U. C. Solid. Bothdo. Solid. Bothdo. U. C. Bothdododododo.			
	3, 200 2, 816 325 275 173 60 48 40 32 32	150 140 8 6 4 4 3 4 2 1	159 150 80 60 140 70 60 33 60 60 60	4 6 3 1 1 3 2 2 2 2 2 1 1 1	1 2	5 8 3 1 3 2 2 2 2 1 1	3, 200 2, 816 325 275 173 60 48 40 322 32						

White County-

			C	output of M	fines in To	ns.	l product.
Number.	Name of Operator.	Postoffice address of the mines.	Mine run.	Lump.		Total.	Aggregate value of total product
1	SHIPPING MINES. Norris City Coal Co	Norris City	10,343	4,872	8,565	23,780	29,967

Mines reported for 1909, 1. Mines in 1910, 1.

Shipping Mines-Recapitulation by

			Production	on of Differ	ent Grades	in Tons.			-VIII
Counties.	Number of mines.	Mine run.	Lump.	Egg.	Nut.	Pea.	Slack.	Total.	Average value per ton- grades.
Franklin	10	125, 284	530, 688	335,347	369,685	662,875	47, 264	2,071,143	1.055
Gallatin	2	17,149	22,731		10, 498	6,549	12,088	69,015	1.005
Jefferson	1	1,200	3,885		1,770	1,630		8,485	1.25
Perry	18	447,535	379, 937	207,428	41, 464	283,847	24,599	1,384,810	.92
Saline	17	769,821	1, 171, 344	147,964	205,397	754,793	5,746	3,055,065	.807
White	1	10,343	4,872		3,376	3,387	1,802	23,780	1.26
Total	49	1,371,332	2, 113, 457	690,739	632, 190	1,713,081	91, 499	6,612,298	.913

Ninth District-1910.

Disposit Outp	ion of ut.	for blasting	on.	Eı	nploye	es.		Accie	dents.	solid or	Ani	mals der-	
Tons loaded on cars for shipment.	Other purposes.	Kegs of powder used f	Days of active operation	Average number of miners.	All other employes.	Total,	Tons mined by hand.	Killed.	Injured.	Blasting coal—From undercut or both.	Mules.	Horses,	Number.
12,310	11,470	534	203	24	22	46	9, 182			Both			

Counties—Ninth District—1910.

Disposit Output-		ing coal.			Em	ploye	s.			В	lasting Coa	nl.
Loaded on ears for shipment.	Other purposes.	Kegs of powder for blasting coal.	Days of active operation.	Miners.	Others.	Boys.	All above ground.	Total.	Tons mined—By band.	From solid—Tons.	Undercut—Tons.	Both methods—Tons,
1,988,687	82,456	24, 910	183	568	1,755	43	264	2,630	499,556	57, 238	708,004	1,305,901
58, 139	10,876	3,378	168	83	31		12	126	69,015	69,015		
800	7,685	196	151	20	10		5	35	8,485	8,485		
1,135,631	249, 179	36,576	154	1,303	880	16	162	2,361	1,002,920	829, 199	270,692	284,919
2,965,018	90,047	42,018	175	306	3,365	60	350	4,081	348,809	215,753	1, 229, 531	1,609,781
12,310	11,470	534	203	24	14		8	46	9,182			23,780
6, 160, 585	451,713	107,612	169	2,304	6,055	119	801	9, 279	1,937,967	1,179,690	2, 208, 227	3,224,381

Local Mines-Recapitulation by

			Producti	on of Diffe	rent Grade	s in Tons.			-AJI
Counties.	Number of mines.	Mine run.	Lump.	Бия.	Nut.	Pea,	Slack.	Total.	A verage value per ton—grades.
Gallatin	7	600	6, 426		451		200	7,677	1.253
Jefferson	1	32						32	2.00
Perry	5	1,719	2,922		985	 		5,626	1.497
Saline	11	3,558	2, 175	1,300				7,033	1.308
Total	24	5,909	11,523	1,300	1,436		200	20,368	1.341
The State	73	1,377,241	2, 124, 980	692,039	633,626	1,713,081	91,699	6,632,666	.914

Whole number of mines reported for 1909, 76. Number of new mines opened during the year, 7. Number of mines abandonded during the year, 10 Whole number of mines reported for 1910, 73.

All Mines-Recapitulation by

			Producti	on of Diffe	rent Grade	s in Tons.			IIV
Counties.	Number of mines.	Mine run.	Lump.	Egg.	Nut.	Pea.	Slack.	Total.	Average value per ton-All grades.
Franklin	10	125, 284	560, 688	335, 347	369,685	662,875	47, 264	2,071,143	1.055
Gallatin	9	17,749	29, 157		10,949	6,549	12, 288	76,692	1.03
Jefferson	2	1, 232	3,885		1,770	1,630		8,517	1.253
Perry	23	449, 254	382,859	207, 428	42, 449	283,847	24,599	1,390,436	.923
Saline	28	773,379	1,173,519	149, 264	205, 397	754,793	5,746	3,062,098	.808
White	1	10,343	4,872		3,376	3,387	1,802	23,780	1.26
Total	73	1,377,241	2,124,980	692,039	633, 626	1,713,081	91,699	6,632,666	.914

Counties—Ninth District—1910.

Dispositi Output—	Disposition of Output—Tons.				Emj	ployé	s.			В	lasting Coa	1.
Loaded on ears for shipment.	Other purposes.	Kegs of powder for blasting coal.	Days of active operation	Miners.	others.	Boys.	All above ground.	Total.	Tons mined—By hand.	From solid—Tons.	Undercut-Tons	Both methods—Tons.
	7,677	459	141	24			4	28	7,677			
	32		20	2				2	32			
	5,626	201	113	20			2	22	5,626			
	7,033	323	85	26			3	29	7,033			
	20,368	983	104	72			9	81	20,368			
6, 160, 585	472,081	108,595	147	2,376	6,055	119	810	9,360	1,958,335	1,179,690	2,208,223	3, 224, 381

Counties-Ninth District-1910.

Disposit Output-	ion of -Tons.	ting coal.			Em	ploye	ės.			Blasting Coal.			
Loaded on cars for shipment.	Other purposes.	Kegs of powder for blasting coal		Miners.	Others	Boys.		Total.	Tons mined—By hand.	From solid-Tons.	Underent—Tons.	Both methods-Tons.	
1,988,687	82,456	24, 910	183	568	1,755	43	264	2,630	499, 556	57, 238	708,004	305,901	
58, 139	18,553	3,837	167	107	31		16	154	76,692	69,015			
800	7,717	196	86	22	10		5	37	8,517	8,485			
1, 135, 631	254,805	36,777	144	1,323	880	16	164	2,383	1,008,546	829, 199	270, (92	284,919	
2,965,018	98,080	42,341	137	332	3,365	60	353	4,110	355,842	215,753	1,229,527	2,609,785	
12,310	11,470	534	203	24	14		8	46	9,182			23,780	
6,160,585	472,081	108,595	147	2,376	6,055	119	810	9,360	1,958,335	1,179,690	2, 208, 227	3,224,381	

TENTH INSPECTION DISTRICT-1910.

FIFTH ANNUAL REPORT.

Counties-Jackson, Johnson, Williamson.

THOMAS LITTLE, Inspector, Murphysboro.

Hon. David Ross, Secretary State Bureau of Labor Statistics, Springfield:

Sur—In compliance with the statute of the State defining the duties of State Inspector of Coal Mines, I herewith submit the fifth annual report of coal mines in the tenth inspection district for the year ending June 30, 1910.

A tabular statement is herewith given of the statistics in each county, showing the number of mines operated during the year, both shipping and local; the new and abandoned mines; the depth of coal below the surface, with the geological number and thickness of various seams; the number of miners and other employés working in the mines and on the surface; the total tonnage of all grades of coal; the average values of coal at the mines, and the aggregate value of the total output of the district, with the casualties in and around the mines, both fatal and non-fatal

The following summary is given as a recapitulation of the principal facts found in the schedule of the various counties:

found in the schedule of the various countries.	
Number of coal producing counties	3 79
Number of new mines	
Number of abandoned mines	4
Number of shipping mines	48
Number of local mines	31
Total tonnage, all mines	
Tonnage of shipping mines	6,504,860
Tonnage of local mines	70,153
Tonnage loaded on cars for shipment	6,079,068
Supplied to locomotives	55,750 130,570
Sold to local trade	
Aggregate value of total product	36 186 164
Total number employed	8.968
Number of miners	4,607
Number of others, and boys underground	3,483
Number employed above ground	878
Number of mining machines	223
Tons mined by machines	
Tons mined by hand	4,402,080
Number of fatal accidents	23 58
Number of non-fatal accidents	285,870
Number of tons produced to each life lost	285,810
Number employed to each fatal accident	152
Anumber employed to each non-latal accident	102

A comparative statement is presented, giving the output of the counties in this district for the years 1909 and 1910, with the increase or decrease:

Counties.	Total Output o of Coal in To	f all grades ns.	Increase.	Decrease.	
	1909.	1910.			
Jackson	650,033	665,385	15,352		
Johnson	1,744	1,084		660	
Williamson	5,901,815	5,908,544	6,729		
Total	6,553,592	6, 575, 013	22,081	660	
Net increase in the district			21,431		

Notwithstanding the long suspension of work in Jackson and Williamson counties, both show an increase, in Jackson county in tonnage of 15,352 tons and Williamson 6,729 tons over the tonnage of 1909 and a net increase of 21,421 tons.

IMPROVEMENTS.

The following improvements have been made in the tenth district during the past year:

The Carterville District Coal Company, Marion, Williamson county, has built a new coal washer. It was erected by the Link-Belt Company. The wood work is yellow pine. The sills are 12 by 18 inches; the frame work is 6 by 10 inches, bolted together. The engines are 11 by 14 and the machinery is run by a rope drive, having two gig boxes. The coal is washed, then separated through a revolving screen. The screen is 9 by 20 feet and makes five grades of coal. There are five coal bins, which hold sixty tons each; the screenings' bin holds 200 tons. The elevator and drags which take the screenings up to the washer are run by a 11 by 14 engine. The capacity of the washer is about 100 tons per hour, and is constructed so that the coal can be loaded into cars of the Iron Mountain railroad on one side and the Chicago and Eastern Illinois railroad on the other side.

The Standard Colliery Company No. 1 has built a coal washing plant at Whiteash, Williamson county. It was erected by the Pittsburg Coal Washer Company, Pittsburg, Penn., and has a capacity of 90 tons an hour. The machinery is run by a rope drive attached to a pair of engines 12 by 16 inches, which has two gig boxes. The coal is elevated to a shaker screen after it is washed, which makes Nos. 1, 2 and 3 coal; Nos. 4 and 5 are carried to a revolving screen and there re-screened. The unwashed coal bins have a storage capacity of 200 tons. The frame work of the washer is 3 by 4 inch angle iron; the sides are covered with galvanized iron. The washed coal bins are built of cast iron plates three feet square and one inch thick, all bolted together, and have a capacity of 75 tons each. The coal is taken out of the bins at the bottom and loaded into cars. This is the first Pittsburg coal washer that has been built in this part of the State, and it seems to be a good one, being all built of fire-proof material.

The Chicago and Carterville Coal Company, Herrin, Williamson county, has installed at its mine a water tube boiler having 138 tubes. The boiler is 3½ feet in diameter and 18 feet long, 125 horse power. The stack is 125 feet high and 42 inches in diameter. The company has also installed one 175 K. W. Westinghouse Electric generator, with an Eric Iron Works Co. engine to operate the same with direct connections; one Ingersoll-Rand compressor having a capacity for 15 machines; also 23 Sullivan air machines.

This company has also installed at its mine B, Herrin, a water tube boiler with 138 tubes. The boiler is 3½ feet in diameter by 18 feet long and 125 horse power, with chain grate; also two Westinghouse haulage motors, ten tons each.

The Big Muddy Fuel Company, Johnston City, Williamson county, has installed two new boilers, 72 inches by 18 feet, having 70 four-inch flues. They

were built by the Kewanee Boiler Company.

The Carterville District Coal Company, Marion, Williamson county, has put in two new boilers, each 72 inches by 18 feet, with 72 four-inch flues and 125 horse power.

ABANDONED MINES.

The Carterville Mining Company has abandoned its No. 3 Cambria, Williamson county, mine.

The Big Muddy Coal and Iron Company has abandoned its No. 6 mine,

located at Murphysboro, Jackson county.

There are two mines in Williamson county which have not hoisted any coal for two years, known as the Lake Creek Coal Company and Cambria Coal Company of Johnston City, Illinois. These two are new mines.

CHANGES IN NAMES OF COAL COMPANIES.

The Carterville Mining Company, operating mines Nos. 1 and 2 at Marion, Williamson county, are now being operated by the Taylor Coal Company, the postoffice address being Carterville, Illinois.

ane Consumers' Coal Company has changed to the Big Muddy Fuel Com-

pany, Johnston City, Illinois.

The Gulp Coal Company, Marion, has changed to the Pittsburg-Big Muddy Coal Company.

FATAL ACCIDENTS-WILLIAMSON COUNTY.

The following is a detailed account of the fatal accidents occurring in this

district during the year:

July 10, 1909, Fred Kline, miner, married, 48 years old, employed by the Hafer Washed Coal Company at Carterville, Williamson county. Deceased was engaged in loading a car of coal in room No. 11, in four west entry on the north side of the shaft. While at work loading the car a large piece of slate fell from the roof, striking him on the head, causing injuries from which he died. He leaves a widow and one child.

August 27, 1909, William Martin, miner, aged 24 years, single, employed at the Carterville and Herrin Coal Company, Herrin. The deceased was pushing an empty car into his room, when a large piece of slate fell on him, killing him instantly. The room was No. 2 off No. 20 room on No. 2 east entry on south side of shaft. The piece of slate that fell was 7½ by 10 feet and 22 inches thick. There was a slip running across the room, but there were no props put up for 31 feet back from the face of room where

the slate fell.

September 14, 1909, Frank Gemblalis, miner, aged 40 years, single, employed at the Big Muddy Coal and Iron Company's No. 8 mine at Clifford. The deceased was loading coal after the mining machines, miners shooting their own coal. Gemblalis was at the face of his room lighting a shot and came back to a crosscut that was driven behind to room No. 43. While he was in the crosscut waiting for the shot to go off which was in room No. 42, the man in room No. 43 lighted a shot which blew through into the crosscut where Gemblalis was waiting, the flying coal killing him. The room that deceased was working was No. 42 of the No. 2 south on the west side of the shaft.

October 10, 1909, Slage Sewell, spragger, aged 22 years, single, employed in the Johnston City and Big Muddy Coal Company's mine No. 1 at Johnston

City. Sewell was spragging a trip of cars into the bottom of the shaft, 300 feet from the shaft bottom, and while stooping over to put the sprags in the wheels, a lump of coal fell off the car, striking him on the head and fracturing his skull. He died about half an hour after the accident with concussion of the brain.

October 28, 1909, John Yancey, laborer, aged 18 years, single, employed at No. 8 mine of the Big Muddy Coal and Iron Company, at Clifford. Deceased was trying to stop a moving car by putting a pole in front of the wheels. The wheels, in striking the pole, threw him under the car in front of the

rear wheels, killing him instantly.

November 13, 1909, August Brandt, foreman, aged 41 years, married, employed at the Sunnyside Coal Company's mine No. 1, located at Herrin. While tightening a nut on the eccentric strap on the washer engine his coat was caught in the wheel and rope drive, and before the engine could be

stopped he was cut in two. He leaves a wife and three children.

November 14, 1909, Joseph H. Asheman, pumpman, aged 60 years, widower, employed at the W. P. Rend Coal and Coke Company's mine No. 2, located at Rendville. While lowering a three-inch steam line of pipe down the shaft the rope holding the pipes slipped. The pipes falling, caught deceased's head between the pipe and a beam. The section of pipe which caught the deceased was the part that makes the turn from the shaft to the boilers. He leaves six children.

November 18, 1909, James Parks, driver, aged 19 years, single, employed at the No. 1 mine of the Carterville Mining Company. Deceased was driving two mules going down a hill with a trip of empty cars. He made no attempt to sprag the wheels so that he could control the speed of the cars. When he came to the passing branch, the cars went on to the empty track, while the mules took the loaded track, pulling the first car, on which Parks was standing, against the rib of coal, breaking his neck and causing instant death.

November 29, 1909, Frank Murlane, miner, aged 29 years, married and employed at the Johnston City Coal Company's mine at Johnston City, Murlane was working the 7th southeast entry; the morning of November 29th, the mine examiner found gas in No. 7 southeast entry, and Murlane was told to stay out of his place, as there was gas in it; however he did not stay out, but went up the 8th south and through the cross cut into the 7th south with an open lamp, igniting the gas causing an explosion which killed him instantly. He leaves a wife and one child.

December 21, 1909, D. Armstrong, driver, aged 17 years, single, employed at the No. 1 mine of the Carterville District Coal Company, Marion. Deceased was going into room No. 20 off No. 6 southeast entry to haul out a loaded car; while walking up the roadway, a large piece of slate fell striking him on the

head, crushing it and killing him instantly.

December 23, 1909, W. D. Pearce, civil and mining engineer, aged 38 years, married, was employed by the Chicago and Carterville Coal Company at mine "A" located at Herrin. Deceased was in the 7th and 8th west entries off the main north entries, taking measurements to make an extension on the map of the mine. He was told not to go into the west entries that there was gas in these entries; when he was ready to go into these entries he was to notify the mine manager who would send a man into the entries with a safety lamp who would make an examination as to the presence of gas. Pearce sent for T. J. Williams, the assistant mine manager, to go into the entries with a safety lamp; when Williams came he told Pearce and his helpers, that there was no gas in the entries and went into the entries with an open light which ignited the gas causing an explosion from which eight men lost their lives. The names of the killed are as follows:
W. F. Pearce, civil and mining engineer; age 38 years. Leaves a widow

and two children. American.

Eugene Barrett, assistant civil engineer; aged 20 years; single. American. T. J. Williams, assistant mine manager; aged 36 years; married. Leaves a widow and three children. American,

Peter Barnes, miner; aged 24 years; single. Italian.

Thomas Harper, miner; aged 30 years; married. Leaves a widow and four children. English.

Salvatore Greco, miner; aged 20 years; single. Italian.

Gardner Shaner, miner; aged 25 years; married. Leaves a widow. Amer-

George Snider, miner; aged 19 years; single. Leaves a mother and sister. February 14, 1910, J. R. Reed, miner; aged 42 years; married; employed by the Big Muddy Coal and Iron Company at mine No. 7, Herrin. Deceased was working in room No. 59 in the 4th north entry on the east side of the shaft. He was drawing a pillar and top coal back of the pillar; while putting up a prop a large piece of slate fell on his head and back fatally injuring him. He died four hours after the accident. The piece of slate that fell was 8 by 10 feet and six inches thick. He leaves a wife and four children.

March 11, 1910, David Brown, miner; aged 35 years; single; employed by the Southern Illinois Coal Company, at Herrin. Brown was drilling out a shot which the shot firers had failed to explode; he used a tamping bar to drill out the hole and when he had the hole drilled out close up to the powder it exploded, injuring him so that he died six hours after the accident.

March 19, 1910, Allen Bales, miner; aged 45 years; married; employed at the Peabody Coal Company's No. 3 mine at Marion. Deceased was loading a car of coal at the face of his room when a large piece of slate fell on him killing him instantly. He leaves a wife and four children.

March 21, 1910, Mip Lingle, miner; aged 40 years; married; was employed at the mine of the Chicago and Carbondale Coal Company, DeSoto. Lingle was lighting a shot; he put the squib in the hole and when he put his lamp to the squib to light it, the squib exploded, setting off the shot; he died three hours after the accident. He leaves a widow and five children.

March 26, 1910, Joseph Davis, driver; aged 29 years; married; employed at the Big Muddy Coal and Iron Company's mine No. 5 at Murphysboro. Davis was riding on the front end of a loaded car in No. 1 south off the 5th east entry and was supposed to have been caught between the car and the rib of coal; his head was crushed and he was dead when found. He leaves a widow and three children.

The tables of fatal and non-fatal accidents follow, together with the county tables which give the output of coal in this district.

Respectfully submitted.

THOMAS LITTLE. State Inspector, Tenth District, Murphysboro.

Fatal Casualties—Tenth District—July 1, 1910.

Date.	Name.	Age.	Occupation.	Residence. (Town.)	Married.	Single.	Widows.	Children.	Dependents.	Cause of Accident.
Aug. 27 Sept. 18 Oct. 10 22 Nov. 18 18 22 22 22 22 22 22 22 23 24 25 26 27 27 28 29 29 20 20 21 21 21 21 22 22 22 22 22 22 22 22 22	Eugene Barratt T. J. Williams. Pet Barnes. Thomas Harper Salvatore Greco Garden Shaver. George Snyder J. R. Reed. David Brown.	24 40 22 18 41 60 19 29 17 38 20 36 24 30 20 25 19 42 35 40 40 29	do . do . do . do . Spragger . Laborer . Forman . Frumpman . Driver . Miner . do	Jefferies Clifford Clifford Johnston City Clifford Herrin Herrin Grey Herrin Grey God God God God God God God God God Marion De Solo Murphysboro	1 1 1 1 1 1 1 1 1 1 1 1 1 1 7 7		i i i i i i i i i i i i i i i i i i i	36611.22.33.44.55.33	2 4 6 2 3 4 5 5 6 4	Falling slate

Recapitulation of Fatal Accidents—Tenth District—1910.

Residence.	No.	Occupation.	No.	Cause of Accident.	No.	Colliery.	No.
Carterville	1 12 1 2 1	Drivers Engineers Foreman Laboreres Manager Miners Pumpman Spragger	2 1 2 1 12 1	Driving belt	1 4 1 1 9 4	Big Muddy C. & I. Co Carterville Dist. Coal Co Carterville & Herrin C. Co Carterville & Herrin C. Co Chi. & Carb., Coal Co do Hafer Washed Coal Co Johnston City Coal Co Peabody Coal Co Rend Coal Co Southern Ill. Coal Co Sunnyside Coal Co	
Total	23		23		23		2

Non-Fatal Casualties—Tenth District—July 1, 1910.

					_				
Date.	Name.	Age.	Residence. (Town.)	Married.	Single.	Children.	Dependents.	Character of Injury and Cause of Accident.	Time lost—days
1909 July 13	E. A. Williams	40	Carterville	1		4	5	Hips injured, fell off cage into	60
22	George Whilie, Jr	17	Murphysboro		1			Arm broken, shoulder dislocated falling slate	60
Aug. 10	William Biggie W. C. Templeton	34 57	Marion Herrin	1		12	1 13	Leg broken, falling coal Hands and body burned, gas	270
20 26	William Taxton A. J. Chittey Sing. Williams	64	do	ı.	1		 ;	ignited. Ankle broken, pit cars. Leg injured, fell from trestle Head and shoulder injured,	49
							5	Head and shoulder injured, falling coal. Hip broken, pit cars.	30
27 27	J. B. Davis David Horn Harry Gardner	30 38	Herrin Carterville	1	i			rips injured, laming state	*
								Head injured, ribs broken, falling slate Toe mashed, engine crank	60 44
11 11	Santo Balsono Albert Parsons	60 24	Murphysboro Herrin	1			1	Rib broken, pit cars Leg injured, pit car	51 30
17 17	Samuel Hill. Santo Balsono Albert Parsons. Cain Weconia A. W. Pool Joseph Crannon	$\frac{20}{30}$	Johnston City Herrin	1		1	2 2	Side injured, fell off elevator	60 32
								Head and hands burned, blown out shot Body injured, internally, pit car	45 147
	David Roy John Tankin			1 1				Face and arms burned, gas ignited.	156
19 21	F. A. Tope	$\frac{45}{20}$	do	1	i	2	3	Leg broken, falling coal Back injured, falling slate	80 39
21 25 25	Samuel Robinson	20 27	Carterville	1		2 4	3	Finger cut off, sprocket wheel. Leg broken, pit car Body injured, falling coal	33 * 30
· 25 26	S. M. Wilson. Joseph Bassa. Ed. McGinnis.	17 30	Clifford Marion	i	`i		····i	Eves destroyed explosion pre-	*
	Nicholas Reggio Ed. Roberts					2	3	pairing shot. Leg broken, falling coal. Ankle injured, fell off railroad	* 146
						3		CarLeg broken, falling coal	30
15 30	Tony Chenski	30 26	Carterville Rendville	1		3	4	Leg broken, switch lever Leg broken, pit car	45 60
Dec. 3	Fate Hallaway W. M. Bryant	$\frac{29}{64}$	Herrin Murphysboro	1		4 2	5 3	Leg broken, pit cars Foot injured, falling coal	120 53
23 23	Frank Flemting. Fate Hallaway. W. M. Bryant A. J. Houston. Charles Clen. James Martino Edwin McDowell George Picarara	21	do	i	1 .;	3	4	Body injured, gas explosion do Body burned, gas explosion	* * 45
	Edwin McDowell George Picarara	36 61	Murphysboro	1		2	3 2	Finger broken, mining machine Leg injured, falling slate	38 91
1910 Jan. 11	Hearl Hanson	19	Whiteash		1			Foot and hip injured, pit cars.	40
25	Lena Mann Harry Beney	40	do	1		2 4	5	Collar bone broken, pit cars Face and arms burned, gas igniting	34 31
	William Short M. M. Cox					5 1	6 2	Arm injured, pit car and rib Arm injured, falling slate	45 40
7 7	Petro Passindinis Leon Owen. William Tilley	23 38	Marion Herrin	1	• •	2 4	Ú	Finger injured, mining machine	60 30
8	Gerald Weaver	18 59	Herrin	 'i	1			Hips injured, pit cars Leg injured, pit car Foot injured, falling tie	32 * 35
11 16	Gerald Weaver. A. L. Ross Stanley Baxley. Frank Stevenson. T. D Walker. Toney Nargh. Sylvan Young. Harry Hindman	27 28	Herrin Pinckneyville	1	::	3	4	Finger injured, mining machine	45 30
Mar. 3	T. D Walker Toney Nargh	25 34	Clifford Johnston City	i	1		2	Hips injured, pit car Leg broken, pit cars Hips injured, falling slate	32
10	Harry Hindman	39 19	Herrindo		ì			Foot injured, falling hot poker. Feet injured, falling slate from	52
		- 1					l	gob	52

Non-Fatal Casualties—Tenth District—Concluded.

Date.	Name.	Age.	Residence. (Town.)	Married.	Single.	Children.	Dependents.	Character of Injury and Cause of Accident.	Time lost—days.
17 18 · 24	Lewis Scarbitt	32 34 38 22	Herrin Spillertown Herrin Clifford	1 1 1	1	2 1 1	3 2 2 	Leg and hips injured, pit car Face burned, ignited powder Hip injured, kicked by mule Leg broken, falling coal Finger cut off, tail chain and prop	60 60 36 60 *
Whole r	last time not reported								58 1 14

Whole number injured. [5] Number last time not reported. [7] Number not returned to work. [7]	1 4
Number recovered July 1, 1910.	3
Total days lost, time by men recovered . 2.56 Average days lost, time to men recovered . 59.6	6

Recapitulation of Non-Fatal Accidents—Tenth District—1910.

Residence.	No.	Occupation.	No.	Cause of Accident.	No.	Colliery.	No.
Carterville Clifford Clifford Herrin Johnson City Marlon Murphysboro. Pinckneyville Rendville Spillertown. Whiteash	5 25 2 3 9 1 1	Cagers Carpenter Carpenter Drivers Pireman Laborers Loader Mach helper Mach nunners Mine examien Miner Miner Shothrers Top laborer Timberman Tracklayer Tracklayer Trapper	1 14 1 2 2 1 4 1 2 2 2 2 2 1 1 1 1 1 1 2 1 1 1 1	Blown out shot. Engine crank. Explosion, shot. Falling coal. Falling state Falling state Falling tie. Falling to the coal of t	1 8 9 1 1 1 1		112 12 13 13 13 13 14 15 16 16 17
Total	58		58		- 58		58

Recapitulation of Non-Fatal Casualties, Nature of Injuries, Conjugal Relations and Time Lost—Tenth District—June 30, 1910.

Nature of Injuries.	Namber.	Married.	Single.	Children.	Dependents.	Time lo	ost—days. Average.	Percentage of injuries.
Ankle broken. Ankle injured. Arm broken. Arm broken. Arm sinjured. Backs injured. Bodies injured. Collar bone broken. Eyes destroyed. Faces and arms burned. Finger broken. Fingers broken. Fingers injured. Feet injured. Hands burned. Hands burned. Hip broken. Hips injured. Legs broken. Legs broken. Legs injured. Legs broken. Legs injured. Ribs broken. Side injured. Toe mashed.	1 1 1 2 2 2 5 1 1 3 1 2 2 6 1 6 10 5 10 10 10 10 10 10 10 10 10 10 10 10 10	2 1 2 1 1 1 2 3 1 1 4 8 4 2 1 1	1 1 1 3 3 1 1 2 2 3 3 1 1 1 1 1 1 1 1 1	6 2 7 2 6 2 7 4 12 9 9 10 18 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	8 3 9 3 1 1 8 3 3 1 1 1 1 1 3 2 6 6 1 3 2 2 1 1 1 1 2 2 1 1 1 1 2 2 1 1 1 1 2 2 1	49 30 85 99 222 34 247 38 33 75 180 135 191 181 111 111 111 32 44	49 30 43 50 44 34 38 33 38 30 45 22 78 86 66 66 63 22 44	1.72 1.72 1.72 3.45 3.45 8.62 1.72 5.17 1.72 3.45 10.35 1.73 10.35 1.73 1.73 1.73 1.73 1.73 1.73 1.73 1.73
Total	58	41	17	91	130	2,566	60	100.00

Jackson County-

_			Ou	tput of M	lines in '	Γons.	l product.
	Name of Operator.	Postoffice address of the mines.	Mine run.	Lump.	Other grades.	Total.	Aggregate value of total product.
	SHIPPING MINES.						
4 5 6	Muddy Valley Mining & Mig. Co. Big Muddy Coal & Iron Co, No. 9. Big Muddy Coal & Iron Co, Harrison Gartside Coal Co., No. 4. Gus Blair B. M. C. Co., No. 1. Gartside Coal Co., No. 3. Schmidtgal Coal Co., No. 1. Chi. & Carbondae C. Co., Elk Ridge. Peacock Coal Co. Gus Blair B. M. C. Co., No. 2. Total.	Murphysboro do De Soto Murphysboro		8,006	57,580 46,720 17,753 17,893 10,611	175,661 163,677 106,376 57,598 56,540 24,887 16,729 15,478 15,248 14,253	175,661 189,657 125,960 77,787 70,675 28,579 20,911 15,478 19,670 17,816
	LOCAL MINES.		143,012	220,000	210,010	010,111	112/11/1
2 3 4 5 6 7 8	J. B. Woods. H. S. Phillips Misbel & Wilson V. L. Church. W. M. Wilkinson W. F. Johnson J. B. Schimpf W. B. Campbell H. G. Linkis M. Kirby. Geo. W. Patrick	.do Ava .do De Soto Ava Vergennes Mathews Campbell Hilldo Carbondale	1,104 80 400	3,000 1,618 240 675 720 440 384 360 13	2,000	5,000 1,618 1,344 815 720 520 405 384 360 72	6,585 4,500 2,427 1,800 1,426 1,080 760 600 667 630 72
	Total—21 mines		2,820	10,450	5,668 279,238	18,938 665,385	20,547 762,741
	Total—21 milles		101,002	207,200	210,200	000,000	102,141

Mines reported for 1909, 20. New mines, 1. Mines in 1910, 21.

Tenth District—1910.

Johnson County-

_			Ou	product.			
Number.	Name of Operator.	Postoffice address of the mines.	Mine run.	Lump.	Other grades.	Total.	Aggregate value of total product
1 2 3	LOCAL MINES. J. W. Tyler. W. T. Kidgon. John Hampton. Total.	N. Burnside	4	659 160 114 933	80 40 27 147	739 204 141 1,084	1,048 306 210 1,564

Mines reported for 1909, 3. Mines in 1910, 3.

Tenth District—1910.

Disposit Outp	for blasting	'n.	Employés.			•	Accidents.		solid or	Number of Animals Under-		i	
Tons loaded on cars for shipment.	Other purposes.	Kegs of powder used fo	Days of active operation.	Average number of miners.	All other employés.	Total.	Tons mined by hand.	Killed.	Injured.	Blasting coal—From midereut or both.	Horses.	Mules.	Number.
	739 204 141 1,084	30 4 6 40	150 200 97 149	2 2 2 	2 1 3	4 3 2 9	739 204 141 1,084					ļ	1 2 3

Williamson County-

-		a	O	atput of M	ines in Ton	s.	1 product.
Number.	Name of Operator.	Postoffice address of the mines.	Mjne run.	Lump.	Other grades.	Total.	Aggregate value of total product
2 3 4 5 6 7 8 9 11 12 13 14 15 16 17 18 9 22 22 22 25 26 27 28 9 30 31 32 33 34 35 6	Williamson Co. Coal Co. Chi & Carterville C. Co., B. St. LCarterville C. Co., Dale. Hafer W. Coal Co., No. 3. Madison Coal Corp. No. 3. Madison Coal Corp. No. 8. Southern III. C. & C. Co., Hem. Peabody Coal Co., No. 2. Southern III. C. & C. Co., O. R. W. P. Rend C. & C. Co., O. R. W. P. Rend C. & C. Co., No. 2. Carterville & B. M. C. Co., John Cart. & Herrin C. Co., Jeffrey West Va. Coal Co., No. 1. Donaly-Koenneck C. Co., D. K. Robert Disk Coal Co. Taylor Coal Co., No. 1. ChiHerrin C. Co., No. 1. ChiHerrin C. Co., No. 1. Standard Colliery Co., No. 1.	Johnston City Marion. Herrin. do. do. do. do. do. do. do. do. do. do	257,167 252,212 2,948 9,529 132,686 113,745 42,309 16,426 17,332 117,320 24,334 24,334 24,334 24,334 14,718 24,431 14,718 24,431 16,610 62,563 16,129 14,918	6,336 5,108	157, 962 96, 919 327, 549 246, 529 246, 529 246, 529 246, 530 24, 650 24, 650 24, 650 24, 650 24, 650 24, 650 24, 650 24, 650 24, 650 24, 650 25, 84, 650 26, 450 27, 463 29, 718 20, 718 21, 650 22, 610 21, 610 22, 610 21, 610 22, 610 21, 610 22, 610 21, 610 22, 610 21, 610 21	492,754 406,7539 387,242,3 375,249,3 375,249,691 267,145,2 248,349 232,923 216,645 151,800 174,974 171,903 151,800 151,800 151,800 151,800 151,800 151,800 151,800 151,800 151,800 151,800 151,600 151	\$432,177 375,486 345,526 345,526 347,400 362,560 2240,430 223,514 205,630 245,500 101,719 154,712 146,531 118,201 118,201 118,201 128,550 90,816 90,000 80,000 70,000 63,125 54,400 63,125 54,400 63,125 54,400 63,125 54,400 63,125 54,400 63,125 54,400 63,125 54,400 63,125 64,600 64,660 64,6
38	Total		2,442 1,350,133	1,337,506	3,170,774	2,447 5,858,413	2,447 5,359,928

Tenth District-1910.

Disposition of Output.		or blasting	n.	E	mploy	és.		Acci	dents.	solid or	Ani	mber of mals der-	
Tons loaded on cars for shipment.	Other purposes.	Kegs of powder used for blasting coal.	Days of active operation.	Average number o	All other employes.	Total.	Tous mined by hand.	Killed.	Injured.	Blasting coal—From undereut or both.	Horses.	Mules.	N
464, 0868 401, 935 361, 922 363, 963 363, 814 363, 963 364, 848 365, 963 366, 848 366, 963 36	3,600 26,224 27,722 41,480	12, 4944 13, 4222 10, 291 13, 5, 843 10, 728 10, 728 10, 728 10, 728 10, 728 10, 728 10, 728 10, 728 10, 728 10, 728 11, 728 11, 728 11, 728 11, 728 12, 728 13, 728 14, 782 14, 782 15, 747 16, 748 16, 748 17, 748 18, 748 1	2232 2083 1511 2055 1944 1866 1744 1169 172 171 177 171 144 118 160 160 182 165 165 168 178 168 178 178 182 165 165 168 168 168 178 178 178 178 178 178 178 178 178 17	400 160 271 21	200 156 437 152 105 94 89	3999 3999 3000 3000 3457 4587 3458 2243 2258 2258 2258 2258 2258 2258 2270 1788 1668 1798	254, 213 34, 787 329, 691 267, 145 232, 923 216, 645 185, 800 174, 974 117, 974 119,	1 1 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	1 1 1 6 6 8 8 2 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	Bothdododododododo			1

Williamson County-

			0	ıl próduct.			
Number.	Name of Operator.	Postoffice address of the mines.	Mine run.	Lump	Other grades.	Total.	Aggregate value of total product.
2 3 4 5 6 7 8 9 10 11 12 13 14 15 16	LOCAL MINES. J. S. McMill. Binkley Miles Co. Reace & Taylor Gifford Price. Binkley Miles Co. Benkley Miles Co. Geo. Beltz. John A. Young. Reses-Taylor & Co. L. A. Woodbridge. S. H. B. Binkley H. B. Binkley F. B. Reitley F. D. Roberson S. D. Hill. Mon Shaw. Joe Pordeu. Total.	.do .Carterville .Marion .Cartervilledo	3,600 8,000 7,000 5,000 2,500 800 400 150 50 100 100	\$00 4,067 1,200 600 16 214 120 50 60	1,700 400 100 32	9,200 8,000 7,000 5,000 5,000 4,067 2,400 1,100 127 115 110 100 50,131	11, 140 10,000 8,750 8,750 5,750 6,100 3,400 1,100 524 235 127 120 100 115 155
	Total—55 mines				3,176,621		5,421,859

Mines reported for 1909, 57. New mines, 2. Abandoued mines, 4. Mines in 1910, 55.

Tenth District—Concluded.

Disposit Outp	or blasting	nn.	Employés.				Accidents.		solid or	Number of Animals Under- ground.			
Tons loaded on cars for shipment.	Other purposes.	Kegs of powder used for blasting coal.	Days of active operation.	Average number of miners.	All other employés.	Total.	Tons mined by hand.	Killed.	Injured.	Blasting coal—From undercut or both.	Horses,	Mules.	Number.
	9,200 8,000 7,000 5,000 5,000 4,067 2,400 1,100 127 115 110 100	200 175 160 40 75 100 175 85 74 450 111 8 5 6 6	300 300 200 200 250 300 275 175 125 85 10 133 60 60 100	6 10 3 4 2 5 5 3 3 2 2 2 4 4 2 2 1 1 1 1 1	3 	9 10 4 4 4 7 10 6 4 6 5 5 2 2 2 2 1 1	,200 8,000 7,000 5,000 5,000 4,007 2,400 1,100 416 150 127 115 110 100 100						1 2 3 4 4 5 6 6 7 8 9 10 11 12 13 14 15 16 17
	50,131	1,205	168	54	26	80	50,131						
5,547,358	361,186	220,131	166	4,168	3,592	7,760	4,167,902	21	49				

Shipping Mines-Recapitulation by

			Production	on of Differ	ent Grades	s in Tons.			-AII
Counties.	Number of mines.	Mine run.	Lump.	Bgg.	Nut.	Pea,	Slack.	Total.	Average value per ton- grades.
Jackson	10	149,072	223,805	44,555	23,660	183,351	22,004	646, 447	\$1.148
Williamson	38	1,350,133	1,337,506	530,565	1,064,113	1,403,275	172,821	5, 858, 413	0.915
Total	48	1,499,205	1,561,311	575,120	1,087,773	1,586,626	194,825	6,504,860	\$0.938

Local Mines—Recapitulation by

			Producti	on of Diffe	rent Grade	s in Tons.			-VIII
Counties.	Number of mines.	Mine run.	Lump.	Egg.	Nut.	Pea,	Slack.	Total.	Average value per ton- grades.
Jackson	11	2,820	10,450			5,668		18,938	\$1.085
Johnson	3	4	933			147		1,084	1.443
Williamson	17	35, 157	9,127	800		. 4,115	932	50, 131	1.235
Total	31	37,981	20,510	800		9,930	932	70, 153	\$1.198
Grand total	79	1,537,186	1,581,821	575,920	1,087,773	1,596,556	195,757	6, 575, 013	\$0.941

Whole number of mines reported for 1909, 80. Number of new mines opened during the year, 3. Number of mines abandoned during the year, 4. Whole number of mines reported for 1910, 79.

Counties—Tenth District—1910.

Disposition of Output—Tons.		blasting		Employés.						Blasting Coal.			
Loaded on cars for shipment.	Other purposes.	Kegs of powder for b	Days of active operation.	Miners.	Others.	Boys.	All above ground.	Total.	Tons mined—By hand.	From solid—Tons.	Undercut-Tons.	Both methods—Tons.	
531,710	114,737	9,707	161	405 4,114	584 2,687	32 174	144 705	1, 165 7, 680	214, 156 4, 117, 771	206, 387 3, 195, 061	301,035 1,002,479	139,025 1,660,873	
5,547,358 6,079,068	311,055 425,792	218, 926 228, 633				206							

Counties—Tenth District—1910.

Disposition of Output-Tons.		blasting	1,	Employés.						Blasting Coal.			
Loaded on cars for shipment.	Other purposes.	Kegs of powder for lead.	Days of active operation.	Winers.	Others.	Boys.	All above ground.	Total.	Tons mined—By hand.	From solid—Tons.	Undercut-Tons.	Both mehtods—Tons.	
	18,938	928	173	28			6	34	18,938				
	1,084	40	149	6		1	2	9	1,084				
	50, 131	1, 205	168	54		5	21	80	50, 131				
	70,153	2, 173	168	88		6	29	123	70, 153				
6,079,068	495, 945	230, 806	165	4, 607	3,271	212	878	8,968	4, 402, 080	3, 401, 448	1,303,514	1,799,898	

All Mines-Recapitulation by

			Production of Different Grades in Tons.							
Counties.	Number of mines.	Mine run,	Lump.	Egg.	Nut	Pea.	Slack.	Total.	Average value per ton- grades.	
Jackson	21	151,892	234, 255	44,555	23,660	189,019	22,004	665,385	\$1.146	
Johnson	3	4	933			147		1,084	1.443	
Williamson	55	1,385,290	1,346,633	531,365	1,064,113	1,407,390	173,753	5,908,544	0.918	
Total	79	1,537,186	1,581,821	575,920	1,087,773	1,596,556	195,757	6,575,013	\$0.941	

Counties-Tenth District-1910.

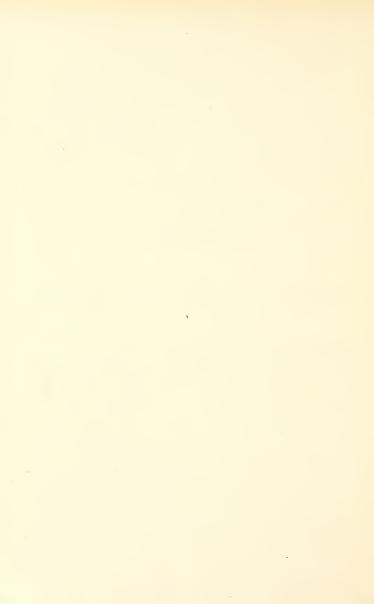
Disposition of Output—Tons.		blasting	n.	Employés.						В	lasting Coal.		
Loaded on cars for shipment.	Other purposes.	Kegs of powder for coal.	Days of active operation.	Miners.	Others.	Boys.	All above ground.	Total.	Tons mined—By hand.	From solid—Tons.	Undercut-Tons.	Both methods—Tons.	
531,710	133, 675	10,635	167	433	584	32	150	1, 199	233,094	206, 387	301,035	139,025	
	1,084	40	149	6		1	2	9	1,084				
5,547,358	361, 186	220, 131	166	4,168	2,687	179	726	7,760	4, 167, 902	3, 195, 061	1,002,479	1,660,873	
6,079,068	495,945	230,806	166	4,607	3,271	212	878	8,968	4, 402, 080	3,401,448	1,303,514	1,799,898	



APPENDIX.

REPORT ON THE CHERRY MINE DISASTER.

LIST OF MINE MANAGERS, HOISTING ENGI-NEERS AND MINE EXAMINERS.



- I. THE CHERRY MINE DISASTER.
- II. THE PUBLIC'S RESPONSE TO THE NEEDS OF THE VICTIMS.
- III. THE SETTLEMENT WITH THE ST. PAUL COAL COMPANY.
- IV. INDUSTRIAL ACCIDENTS—COMPENSATION VS. LITIGATION.



THE CHERRY MINE DISASTER.

INTRODUCTORY.

The appalling loss of human life caused by the fire in the coal mine at Cherry, Ill., calls for something more than a mere recital of the number and names of those who perished. Experience prepares us to expect death at any moment in the mines. Its dangers are so obvious, and seemingly inevitable, that the results in dead and disabled can be figured almost with mathematical precision. Our casualty lists, extending back as far as we have any authentic history of the mine industry, attest the awful toll in life and limb inexorably exacted as a penalty which those who pursue such employment must sooner or later pay. Here at least is one sphere where the rules of immunity have no application. The record shows that with every so many tons of coal, there is lifted to the sunlight the bruised or lifeless bodies of men.

We have in a sense become accustomed to the annual loss of hundreds of mine workers distributed quite uniformly through the working days of the year, lives that are separately but regularly offered as a sacrifice to the demands of the industry, and the slaughter proceeds without exciting any special public comment. Comparatively, it is the great things that impress us, the extraordinary events that compel attention, and the extinction of two hundred and fifty-nine lives in a single accident constitutes a calamity unprecedented in the annals of mining in this State, fully justifying a report, giving somewhat in detail the cause and consequences of the catastrophe; the manner in which a sympathetic public rose to meet the necessities of a suddenly stricken people, and the commendable attitude of the St. Paul Coal Company, as evidenced by the money settlement it has made with the members of the bereaved families or their representatives.

In order to fully understand the conditions under which the fire originated, it is necessary to know the general plan on which the mine was being operated. A first seam was struck which was not operated. Two seams of coal were being mined, the second at a distance of 320 feet from the surface, the third or lower scam at a depth of 485 feet. The lower scam was in process of development. Substantially all the coal mined from the time the shaft was sunk until the day of the disaster had been taken from the second level. While the main hoisting shaft extended to the bottom vein, the cages in that shaft did not descend below the second level. All material intended for use in the bottom vein was lowered in the main shaft to the bottom of the second level and from there transferred to the escapement shaft where, by a separate engine operated from the surface, it was lowered to the bottom seam. So also in the matter of coal or other material hoisted from the bottom seam, the escapement shaft was used to bring them up to the second seam where they were transferred to the bottom of the main second level and from there hoisted in the main shaft to the surface.

The illustration on page 11 indicates the general plan of hoisting, showing also the emergency cage from the bottom to the second level in the main shaft.

Immediately after dinner on the 13th day of November, 1909, a car loaded with baled hay, intended for the use of the mules in the lower seam, was let down the main shaft.

Upon reaching the landing of the second seam, which was the destination of the cases in the main shaft, the car and its contents were taken off, transferred by means of a runabout and started in the narrow passageway leading to the airshaft, from which point, in accordance with the practice, it was to be sent to the seam below. A like operation had been performed successfully on all other occasions, but on this one it failed. Fate, utilizing all the agencies of human frailty, was evidently busy arranging the scenes for a great tragedy, and circumstances, seemingly simple in themselves, combined to create a situation involving the imprisonment and ultimate death of more men than ever before occurred at one time in the history of the State.

Associated with all great calamities are some simple, curious, or mysterious causes. The burning of baled hay, the initial cause of the Cherry disaster, has never been fully explained or clearly understood. Under ordinary circumstances, compressed hay will not burn. It has been the practice in some mines to construct stable partitions of that material and in instances where stable fires occurred everything combustible except the partitions was consumed. It has frequently been exposed to intense fire and heat with the result that only the broken ends on the surface were scorehed and blackened.

The facts as developed by the testimony in this case are that the car containing six bales of compressed hay in its journey to the air-shaft had stopped immediately at the side of, or directly under, one of the burning torches temporarily used to illuminate that portion of the underground workings. Its detention at that point was of short duration but long enough to permit the hay catching fire, a condition that some suppose was made possible by its becoming saturated with oil dripping from the lighted torch. Open lights in the connecting passageways and about the shaft buttons had been used for several weeks prior to the fire. Before that time electric lights were employed. Some delay was experienced in filling the order to replace the destroyed electrical wiring, the new supply having reached the mine on the morning of the fatal day.

From the moment the burning hay was discovered, until the car containing it was finally dumped down the airshaft, not to exceed thirty minutes elapsed, during which time the cagers, Alex. Rosenjack and his assistant, Robert Dean, and the others who aided, acted like men who had confidence in their power to control the situation. That the feeling existed that there was no real danger from the fire and that it could be extinguished without peril to life is indicated by the testimony of men who, in passing it on their way to the surface, stated they could have put it out easily with their coats. One of them when asked why he did not do so said he had an important appointment in Peru and that he must take the 1:30 cage, otherwise he would have to remain in the mine until the next cage for men at 3:30 p.m. the meantime the struggle with this new agency of death in the mine continued until the fire fiend closed the last avenue of escape and the country was startled with a report of the greatest mine horror of modern times. The following general description with plans of the mine, including the testimony given by certain witnesses at the coroner's inquest, are in part copied from a published report approved by Duncan McDonald and members of the Illinois Miners' Executive Board. Where reference is made to page numbers. it relates to the statement made by witnesses before the coroner's inquest. The record of the testimony taken fills 900 pages, and while it is all interesting it is not necessary for the purpose of this report to duplicate it here.

DESCRIPTION OF THE MINE.

MAP "A."

Map "A" is a cross-sectional view of the Cherry mine, looking to the northeast.

Above the main shaft is a steel tipple, which extends 90 feet above the surface.

Immediately back, or south, is the engine room which supplies the power for hoisting cages in the main shaft.

The fan is located a short distance south of this engine room.

The main shaft is 12-ft. 8-in. by 16-ft., and the depth of the shaft is 485 feet in all (pp. 29, 30, 73, 83, 261), the distance from the surface to the second vein being 320 feet, and from there to the third vein 165 feet.

The first vein was not in use, being of no commercial value.

The distance from the main shaft to the escape shaft on the surface is about 225 feet (p. 261).

The escape shaft is used for the down cast and the main shaft for the up cast (p. 261).

In the main shaft there are two cageways from the tipple to the second vein, in which there are two cages which act as a counter-balance to each other. These are 6x16 feet in size,

The cageways are separated by pine timbers 8x12 inches (p. 261), and

running in length across the shaft.

At the bottom of the second vein there is a sump constructed of wood and iron; that is, a space under the cages, in which there are wooden doors lying flat, with a perforated iron plate or screen covering them, and which may be removed.

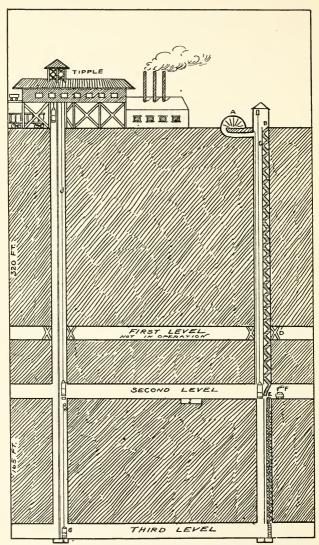
On the third vein bottom there is a small cage, 6x15 feet (p. 773), and a cable attached to a hook which, in turn, is hung upon a projection near the bottom of the second vein. This is adapted so that by removing the doors covering the sump below the main cages it may be attached to the main cage and hoisted from the third to the second vein. This cage was never hoisted but once, and that was at the time it was constructed by the carpenter (pp. 754 to 770).

This cage was so constructed that it was to be operated by being drawn up within about 10 feet from the bottom of the second vein. There the occupants were to get off on a platform, marked on the plat, and from there go up on a ladder a distance of about 10 feet to the main bottom. This cage was constructed about two weeks before the date of the accident by Mr.

Jones. (See Jones' testimony, p. 754).

5

The escape shaft runs from the surface to the third vein, and is 12-ft. fo-in. by 7-ft. 10-in. (p. 261). From the surface to the second vein there were two compartments, in one of which was a stairway, the stairs running at an angle of 45 degrees, with a platform, as provided by law. This compartment was 3-ft. 5-in. by 7-ft. 10-in. Separated from this by planking was the compartment which was used as a down-cast or air shaft, which was 8-ft. 4-in. by 7-ft. 10-in. At the second vein the air parted, a portion of the current going to the southeast and a portion to the northwest.



a Fan. b Escape shaft. c Third vein 'oisting shaft and air shaft. d Timbers closing first vein e Trap door at the top of the stairway on second level. / Torch where hay eaught fire. g Small cog_{e} be attached to main cage above. b Hook for attaching to main eage. if Sumps. J Main hoisti g shaft

From the second vein to the third, in this shaft, there were three compartments—one used for a stairway, one for a cageway, and between the two a chamber for the down-cast and the counter-balance for the single cage which was operated between the second and third veins (pp. 22, 23, 46, 37, 261). The cage here was operated by the escape shaft or third vein engine. The signalling for this shaft was operated directly from the second and third vein to the "third vein engine room" (p. 85).

On the third vein there was a sump or hole about 6 feet deep, below the surface of the bottom, with a floor over it about 2 feet below the surface of

the bottom (pp. 51, 52, 71, 72, 73).

Referring to the stairway, at the third vein there was a ladder, with steps twenty-four inches across and about three inches wide, running up to the stairs a distance of about ten feet. From there the stairs continued, until about six feet below the second vein bottom, at which there was another ladder which ran to the second vein bottom. The opening from this stairway was covered by a trap door, 2x3 feet (pp. 104, 239), and which opened up between the two rails of a track (pp. 67, 74). About six feet from there, was a ladder with hinges which could be swung up and hooked or let down (pp. 59, 131, 132), the lower step being eight feet from the trap door referred to which led to the stairs running to the third vein.

PLAT "B."

Plat "B" is a plat of the second vein, showing the position of the main shaft, the main bottom, the east and west run-arounds, the main air course, the mule stable, the pump and air course, in the immediate vicinity of where the accident took place.

The main bottom is 14 feet wide, running northeast and southwest 250

feet in each direction from the main shaft.

There were two powder holes, one 20 feet northeast and the other 20 feet southwest of the main shaft (pp. 63, 245, 248). They were about 12x8 feet in size.

There is a run-around to the southeast of the cage and about 12 feet of a passageway running into the mule stable (p. 261) and an opening into the pump room.

Fifty feet southwest of the cage is the main passageway or main air course,

which is about 5 feet by 6 feet.

In this passageway 20 feet from the main bottom is a door, and 20 feet further is another door. Down this road to the southeast is the mule stable, which faces on this main air course a total of 50 feet, with a sump which runs half way across the main passageway and is covered by boards; and from there a track runs up to the point indicated by a switch, and from that point two tracks run to the southeast. The track southwest runs across the trap door at the escape shaft (pp. 67, 74) heretofore referred to, in the description of the cross-section map, which door opened between the two rails, the two tracks continuing southeast past the shaft to the point where they met at the switch.

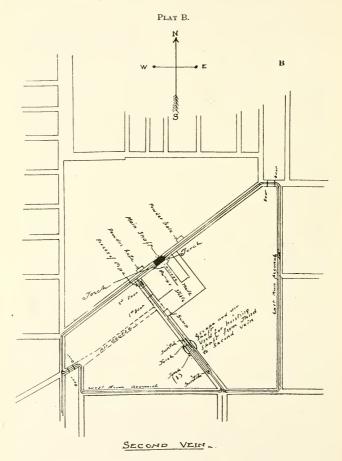
At the north end of the main passageway there were thirty or forty pieces of pipe lying on the floor, from 2 to 4 inches in diameter (pp. 67, 68, 74,

98, 108).

The cars when sent to the third vein were drawn by mules around the east or west runway, as shown by the map. They were brought northwest through the main passageway on the southwest track, passing by the side of the cage to the southwest of it, and when a loaded car was brought up by the cage the empty car was placed against it, and in pushing the full car off from the cage the empty one took its place and was lowered to the third vein.

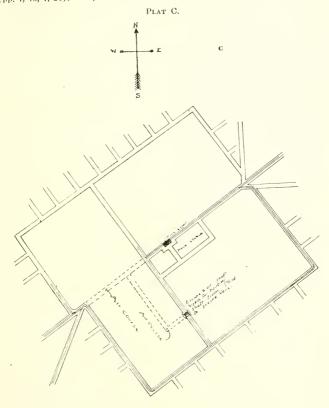
On the 13th of November, 1909, six bales of hay (p. 9) on a car were sent from the tipple about 12:30 p. m. They were taken in charge by Charlie Thorne (p. 219), who took the car around the west runway up through the main passageway, and there hitched his team to a loaded trip and took it

southeast, leaving the car standing there, from which place it was later moved by "Bobble" Deans and Matt Francesco to a point in front of where Torch No. 1 was hanging (pp. 7, 11, 24, 68, 95, 135, 136, 137, 147, 148, 153, 155, 224, 225, 226, 227, 230, 235).



The timber at the third vein bottom was about 7 feet high from the floor. It was upon one of these timbers that the torch was hanging which set fire to the hay.

Electric light equipment had been used throughout this mine and at this vein for some time, but about a month before the date of the fire the main cable burned cut, and torches were used generally in lieu of electric lights (pp. 4, 43, 7, 24).



THIRD VEIN.

PLAT "C."

Plat "C" shows the third vein. The bottom at the main shaft on the third vein is not used for any purpose. The mule stable is located near there, and tracks run around in the different directions to take the coal from the

TRAP

PLAT D.

CAGE

Showing TRACKS AND SWITCHES TRAP DOOR ETC

D

AT AIR SHAFT SECOND VEIN

rooms into the different entries and from there to the third vein hoisting cage, which is operated through the escape shaft, as stated in the description of the second vein plat.

There was no fire equipment in the third vein excepting a hose which was used to wash mules with, and which was about 20 feet long (pp. 79, 106, 125, 130, 163), and which could be and was attached to the water pipe at the third vein bottom to extinguish (pp. 76, 77, 51, 52, 93) the burning car of hay (p. 122) when it was dropped down through the shaft to the third vein, as hereinafter described.

PLAT "D."

Plat "D" shows substantially the location of the trap door, marked in black, the cageway at the second vein bottom, where the fire started (p. 136).

THE COMPANY.

The St. Paul Company is a corporation organized under the laws of the State of Illinois under a charter dated Oct. 28, 1902. It is authorized to mine coal in the counties of Putnam, La Salle, Grundy, Bureau, Marshall, Stark and adjoining counties, to lease, purchase and own coal lands and other lands with coal mining rights and to control such works, buildings, improvements, etc.

The company owns two mines, one at Granville and one at Cherry. The mine at Cherry is operating 7,217 acres of land with 360 acres worked out. The output of the mine is about 300,000 tons annually. It has a daily capacity of 1,500 tons.

H. C. Haugan of 122 Judson avenue, Evanston, Cook county, is president of the company and Burton Hanson of 4637 Greenwood avenue, Chicago, secretary.

Those in charge of the mines were: W. W. Taylor, general manager and superintendent; mine examiner, H. C. Maxwell; mine superintendent, Joseph Steel; mine manager, John Bundy; pit boss, Alex. Norberg, deceased; engineer, main shaft, John Crowley; engineer, escape shaft, John Raisbeck; mine examiner or fire boss, George Eddy.

When the company sunk the shaft five years ago, it found that the first vein was of no commercial value, so they continued sinking the main shaft and the escape shaft to the second vein, which was operated by the room and pillar system. This is geological seam No. 6. During the year 1908 the company commenced to work the third vein by the long wall system; this vein is 485 feet below the surface. This is geological seam No. 2. The coal of the third vein is not so easily reached but is better than that of the second vein.

THE FATAL DAY.

On the date of the accident there were 481 men employed, including all occupations, diggers, drivers, company men, trappers, spraggers, etc.

The men entered the mine from 6:30 to 7:00 o'clock in the morning and there was a cage run, mid-forenoon, noon and at 1:30, at which time those who discontinued work at that hour might be brought up. The regular hour for discontinuing work was 3:30 p. m. At about 3:00 p. m., the diggers were permitted to fire their shots (pp. 192, 193). There were no shot-firers in this mine because there was usually less than two pounds of powder used for a charge.

On the 13th of November there were several men who discontinued work in time to catch the 1:30 cage and this in a measure accounts for the fact

that there were only 259 lives lost.

Between 12 and 1 o'clock p. m. (p. 541) on the fatal day, six bales of hay, standing upright, were placed in a coal car, which was of the average size of cars, that is, 6 feet long, and 3 feet wide (p. 10), and were to be taken to the third vein mule stables. There were from sixty to seventy mules in the second and third veins. The hay was taken down on an average of once every twenty-four hours. The car in this instance was lowered from the tipple to the second vein and there it was drawn by mules in charge of Charles Thorne (who usually drove six cars with three mules), through the east runaround (pp. 218, 219) and up the main passageway over the switch immediately southeast of the third vein shaft or escape shaft (p. 219). It was left here by Thorne, who hitched his mules to some loaded cars and started on his run to the main bottom.

Robert Deans, the assistant cager, and Matt Francesco, pushed the car some distance up toward the shaft and right close to the torch (p. 136), which was hanging upon a timber (p. 224) near the bottom at the escape

shaft.

The electrical equipment of the mine had been out of use for a month (pp. 7, 24, 443), which resulted from the short circuiting of the main cables due to being water soaked. The torches which had been placed at the main bottom and also at the escape shaft to which we have been referring, were constructed of pipe about 2 inches in diameter, 12 to 16 inches long, with a cap on one end and a reducer on the other in which a cotton wicking was placed. The torches were filled by the cagers with kerosene furnished by the company (pp. 68, 102, 132) and were attached with pieces of wire to the timbers (p. 431). The wire was around the center of the pipe so that the torch would hang horizontally, the burning end would be lowered as the oil was consumed, so the oil would run down upon and against the wick (p. 225). Frequently the oil would seep through the end where the wick was inserted and drop. (Pp. 230, 367, 226.) The torch near which the car and hay were moved by Robert Deans and Matt Francesco hung so low that the lower end of the blaze was from 5 to 8 inches below the highest part of the baled hay (p. 137). After pushing the car to this point Francesco and Deans left that place and went to the other track and coupled some loaded cars (p. 138), after which they discovered that the hay was on fire, which was about 1:25 p. m. (p. 139).

The air current at this point was fanning the fire into a biaze and Rosenjack and Deans then started to push the car northwest through the main air course to the sump near the mule stable, intending to get water from that sump and to put out the fire. Upon being unable to push the car to the sump, Rosenjack and Hanney, who had just come up from the third vein on his way home and whom Rosenjack called upon for help, got in back of the car and attempted to push it toward the third vein shaft. The air passing through the main air course fanned the flames into considerable proportions and the pine timbering, which was used generally in this mine, in the main air course, caught fire.

Albert Buckle, a boy of fifteen, Francesco and others were told to get their

pails and go around to the main bottom and get some water.

In the meantime Rosenjack communicated with William Smith, the cager at the third vein bottom, and told him they had a car of hay on fire (p. 122) and that he, Rosenjack, wished to send it down to the third vein and incurred if they could take care of it. Smith responded, "Let her come," Rosenjack requested Vickers and Theo. Dehesse to put the car of burning hay upon the cage and that he, Rosenjack, would go down to the third vein and assist in putting it out. The car was drawn partly upon the cage, but the heat was so intense that the car was not accessible and the drivers and others assisting were only able to push the car a short distance upon the cage (p. 159).

In the meantime-Rosenjack had come up from the third vein and as the woodwork at the side of the cage was on fire he signaled (pp. 122; 890) to hoist the cage, which was raised four feet, the car and hay falling under the cage down into the third vein sump (pp. 51, 52). Here Smith and Norberg were stationed and they attached the hose which was used at the mule stable in the third vein and put the fire out (p. 76). This was about 1:48 p. m. Some of the miners who had noticed that the air was bad and that there was smoke in it, left their rooms and came to the third vein bottom. They signaled for the cage and received no response and went up the stairs. Probably the last who came up from that vein was William Maxwell and his son. When they reached the third vein a man was ahead of Maxwell. He lifted the trap door and the smoke and flames were so intense that he said they could not get through. Maxwell, an old man, said, "We must," and he crept through with his son and went through the east runabout and was finally pulled on to the main hoisting cage and brought to the top insensible.

His story of their escape is given on page 29 of this report.

During this time several signals were given to stop and reverse the fan, etc. (pp. 218, 219, 890). The fan was first stopped, then reversed, then stopped and then drawn in its usual course, then reversed until the flames which were drawn up the escape shaft, burned out the doors and disabled the fan.

When the fan was reversed it drew the flames up through the escape shaft from the second vein to the surface and cut off all means of escape from the third to the second vein through the third vein hoisting shaft or the

stairway (p. 416).

At about 1:40 o'clock the last signal was received by the third vein enginer (p. 890) for hoisting the cage to the second vein. The probabilities are that whoever took the cage at that time were burned to death upon reach-

ing the second level and there was no signal after that.

In the meantime the fire had been noticed by the cagers on the main bottom, but before referring to this, the attention of the reader should be called to the fact that for months there was no appliance for hoisting men from the third vein to the second vein through the main shaft. There was a bucket there which was attached to a rope, which in turn could be attached to one of the main cages. Two or three weeks before the date of the accident, a small cage had been constructed to take the place of the bucket. But this cage was not available. A rope was attached to this cage which was hanging on some cleats or a projection near the main bottom. This hook could be attached or hooked on the cage, and thus raised from

the third vein to within about 10 or 15 feet of the second vein bottom. Most all of the miners working in the third vein were not familiar with the fact that there had been any change in the construction or method of escape through the main shaft (p. 435). Hanney, who was president of the local union, a man of more than average ability, did not know that such a change had taken place and was under the impression at the time of the accident that the bucket was still the only thing that could by any possible means be used for hoisting purposes from the third to the second vein in the main shaft.

The small cage that had been constructed (pp. 765, 766, 767) to be operated in case of emergency from the third to the second vein was of small dimensions and it was smaller than the compartment in which it was to operate, and when it was drawn up the distance between the side of the cage and the bunting or the side of the shaft was covered with planks which formed a platform. From this platform there was a ladder about 8 or 10 feet long which led to the bottom of the second vein. When this cage was used by the rescuers after the fire it stuck in the shaft and the rescuers were obliged to climb on top of the cage and then climb up 10 feet to the landing. The persons using this method were then obliged to come up through the opening left by a main cage when it was hoisted and could not get up when the cage was down on either of the respective sides where the cage rested unless they could crawl through the space between the two compartments occupied by these cages, which was about 8 to 12 inches in breadth.

At about 1:30 p. m. some miners (pp. 21, 42) became aware of the existence of the fire. The trapper boys came to the main bottom and asked to be permitted to go up. The cager at first refused, stating that they would get the fire out (p. 147) and commence to work again. Later he sent them up.

AT THE MAIN BOTTOM.

The cagers at the main bottom were among the first at the main shaft who became aware of the existence of the fire. They continued to hoist coal for some five or ten minutes after they knew the fire was in existence, evidently under the belief that it would be put out. When the serious nature of it became apparent, several of the drivers and company men endeavored to give notice to the diggers, although the fire had burned for at least forty-five minutes to an hour before any such attempt was systematically made. The trapper boys near the main cage were taken up early (testimony of witnesses, pp. 410, 141, 552), and the cages were then continually operated for the purpose of taking the men up from the main bottom.

During the fire there was an attempt made to get into the mule barn, which had been filled with smoke and flames, to attach a hose, but the heat and smoke prevented; this hose was brought down from the surface. Being unable to get into the mule barn they made an attempt to attach it to a nozzle or piece of water-pipe near the main cage. The pipe was too small, the water was hot and the hose could not be held around or against the

opening of the pipe.

Whether the cage at the third vein bottom was ever attached to the main cage does not appear very certain from the evidence taken. It is certain, however, that if it was it was immediately detached, for there is no evidence that the cage was used, that a rope was attached, or that any attempt' was made to hoist the men from the third vein by using the third vein cage in the main shaft, which some have called the "emergency cage."

TWELVE HEROES.

The condition of the main bottom at 3:30 or 4:00 o'clock was such as to indicate that all possibility of escape was rapidly disappearing. The flames were very intense. At about this time the cage was lowered (pp. 745, 832) with twelve men on it and word was left on top that the engineer should pay strict attention to signals. The signals he received were as follows: Three bells (meaning to hoist); four bells (meaning hoist slowly); then four bells (meaning to hoist slower); then signals to lower and no more signals were received. About fifteen minutes after that the rope was seen to shake. The engineer, after long and repeated pleading and begging on the part of many of the men (pp. 745, 832), hoisted the cage and the rescuers were found, some in the cage and others on top of it, all dead. It happened that one who was rescued seven days after the mine was closed tells that he reached the shaft (p. 410) and found no cage there and using his cap to protect his hands, tried to signal for the cage to come down; that in a measure accounts for the confusion of signals received by the engineer.

This was one of the most unfortunate incidents in the history of this disaster. Here were twelve brave men that were willing to risk and, as it were, sacrifice their own lives in an attempt to save their fellow-townsmen

from their peril in the mine.

The names of these men should go down in history as heroes in the time of the darkest tragedy that has occurred in the industrial field of this State. They had volunteered to go down into the mine expecting to be able to notify the miners and aid them in their escape, but they were too late. They were not all miners. Their names and occupations are as follows:

John Bundy, mine manager; Andrew McLuckie, miner; Harry Stewart, miner; James Spiers, miner; Mike Suhe, miner; Robert Clark, miner; Aleander Norberg, assistant mine manager; Isaac Lewis, liveryman; Domini-Dormento, grocer; John Flood, clothier; John Sczabrinki (Smith), cager;

Joseph Robesa, driver.

This was the seventh time that the cage was lowered with rescuers upon it after the seriousness of the fire was realized, and each time they had succeeded in bringing up some men alive; each time those who ventured down encountered the smoke and came up almost asphyxiated. The fire was getting nearer and nearer the main hoisting shaft; but this last cage of men were doomed to meet their fate in a supreme effort. When the cage was raised eight of them lay on the floor of the cage. Their clothing was still blazing and their arms and hands were in convulsive postures, just as death had seized them and when they had tried to protect their faces from the awful heat. Four of the bodies were lying across the top of the cage where they had died in a frantic effort to climb away from the fire

When they were hoisted to the surface it was a most pitiful sight. The relatives of these men were there and the scene witnessed was the most heartrending. Strong hearted men broke down. After all, the story of the

twelve martyrs is but a phase of the great disaster.

The time that elapsed from the beginning of the fire until the last person came out shows that if there had been some system of notifying the men at work in the mine they could all have gotten out. Or if the serious danger had been realized in time by the cagers and others at the hoisting shaft the men could have been notified by messenger, as some were who es-

caped and whose stories we here publish.

We have selected from the testimony of those who were in the mine at the time of the fire and made their escape, and have transformed this testimony into a story or narrative, using their own words. Space will not permit us to give the account of all of them, as the testimony comprises nearly 900 pages, but we will give those which we think will best enable the reader to understand the conditions on that fateful day. Many others would be interesting, however.

AS TOLD BY THE DIGGERS.

The first is that told by James Hanney, who was president of the local union, and who testified that he was 56 years of age, born in Scotland, and commenced to work in the Cherry mine a year ago last June. worked in different kinds of mines before this one, and had worked in the third vein about a year. He says: "We were coming from the third vein and started through the main air course in the third vein. We had to hurry to get to the big shaft to get up at half past one. The shortest route is about 200 feet through the main air course. At the second vein we saw the car of hay on fire and the cager asked us to give him a hand to shove the car back. We gave him a hand and shoved the car back as far as we could stand it, about ten or fifteen yards, and then the heat and smoke were so bad we could not stand it any more, and I went out to get assistance to stop the fire. Nothing was said about notifying the men, for no boss was around. Some one had to get assistance and I went to get it. cager let us go up because it was time. We took the cage to the top. When I first saw the flames they were probably five or six yards long. There was a great current of air in the main entry or air course, and the fire was reaching out to the shaft to where the barns were situated, toward the main shaft. Upon reaching the top I told the boss there was a fire down there and to stop the fan, and the fan was stopped. It was about 4:00 o'clock when they covered the main shaft on the surface and I don't know why they didn't cover the escape shaft, but I think the people would not permit it. The superintendent said, 'If I ordered the escape shaft covered the people in town would kill me.' I worked in the third vein since it opened—that is a year ago last August. There is no fire equipment there; none was ever pointed out. The doors and the entries there are about 5x5,

and are timbered with white pine."

William A. Smith testified that he lived in Cherry and was a cager in the third vein on the day of the fire. He said: "The best I remember of it we were waiting at the bottom for what we thought was empty cars, because when they run out of cars often they would hold the cage until they got empties and then send them down to us. There were three bells rung and one of the cagers from the second level came down and the best I remember he told us that they had a car of hay afire up there; it was Alex. Rosenjack. It was shortly after half past one. Then I let up my half past one cage of men. He asked, 'Should I send it down or could we handle it down there.' I said yes send it down. Instead of going up with it he said, 'Just bell it away one bell, for the boys up there.' I did so and waited down there probably five minutes, possibly eight, it might not have been more than four. I didn't look at my watch and couldn't say and the hay hadn't come down yet. Mr. Norberg, the boss of the third level, came out to the bottom of the third level and wanted to know what was wrong. One of the boys told him there was a car of hay on fire up there and he hollered up for them to send that hay down. He got no answer; then he hollered again rather rough and loud and still there was no answer. Then he says, 'I will go up.' And he started up and I would not say positive but I think that cager Rosenjack went with him. They walked up the manway. We waited there some time again and still no hay came down; one of the drivers said, 'I will go up and tell him if he can't get it on the cage to shove it into the shaft and we will take care of it.' We waited some more and then we started. This was Andy Lettsome; and Dave Wright says, 'I will go with you'; and the two went up. When they about had time to walk up the manway the bell rang four and one; that was to hoist and go ahead slowly and they hollered 'Look out'; the car of hay and all came down below like a flash in the smoke. I think both car and hay was all afire when it reached the sump. It had fallen 160 feet; we were ready with the hose and turned the hose on it and put it out. It didn't take long because we had the force pump and plenty of water. When it came down it was very hot and there was fire on the cage; also the protecting sheet of iron on top of the cage was red hot; we turned the hose on that and cooled it down. John Brown and Oley Freiburg had hold of the hose besides me. When the car came down there John Brown, the opposite cager to me, had the hose and I was standing at the water column; the hose is connected to the column and there is a valve on that that you have to open to let it flow out through the hose, otherwise it would go up through the column to the second vein or into the main sump. When the hay came down I opened that valve and threw the water right on to it and it flew back into my face; the water hit me and I could not see anything, so I stepped back. I was not in the smoke and it didn't bother me where I was; then Oley Freiburg took the hose out of my hand and said, 'Go and get some air and let me have it.' About the time we got the fire out Andy Lettsome came back down to see if we had gotten the fire out and he says, 'There is still fire in the timbers up there that I don't like the looks of, but I hurried back to see if you got this out.' some of us will have to go up and see about that. I don't know how many times we belled, but we got no reply from the engineer, so I said we will have to walk up. As soon as we got to the second vein we thought there was enough fire to be dangerous. I said we have got to get our men up from the bottom; he says, 'I will do that;' then I said one of us ought to go up and the other down; one should go up and tell the engineer to go up without signals; he says, 'You go on up and I will go back after Pa.' I asked, "Will you notify the men?' He says, 'Sure I will scare them out.' So I went up and he went down. That was all I saw of the fire. I went up the stairway in the escape shaft; when I got about half way the air was coming a moderate gait, about as fast as a man reasonably would require but suddenly the fan stopped. I didn't think anything of it, because it had stopped once or twice before for a time. In about half a minute, I will say from a half to a minute and a half, the fan started up again. But they had reversed the fan and I knew that the fire and smoke would come up and catch me on the way, so I climbed faster than I had ever climbed in my life before. The smoke overtook me when I got about half way up or a little more, I don't know just how far, for I was choking and climbing all the time; I don't know how I did get up the rest of the way."

William Vickers testified that he lived in Cherry four years, was married, and entered the mine on the 13th at about twenty minutes to seven. worked in the third vein since 1908 and was working in Room No. 1 in the southeast with his 'buddie.' At about twenty-five minutes to three he heard of the fire and heard hollering at the switch to 'Come out,' that there was a fire in the second vein, and he says I hollered into the straight East, 'Come out right away; the shaft is on fire!' The men were Italians, and did not understand English well. They said, 'What's the matter?' and I said, 'The shaft is afire; get out!' and one of the fellows understood English a little better and he says, 'What's the matter?' and I said, 'Fire in the second vein, come out quick; right away!' and I showed them out from the wall to the road ahead. The bottom is about 300 feet from where I was working. the third vein bottom I saw a hose in a man's hand and he was fighting the fire, putting out the burning hay. You could not see the blaze, just the steam and smoke. The man was Ole Frieburg; he is down there yet. It was a short hose. There were twelve or fifteen men behind me, and I was at the escape shaft with my foot on the ladder to go up on the steps. turned to my buddie and he was right behind me. I told him I was going to take the coal cut of my shoes and I turned back and said, 'Go on up, and I will come up after you.' So I turned round to Ole Frieburg, who was standing there, and asked him if they were not running the cage, and he said 'No, it has been quiet for quite a while.' I got the coal out of my shoes and started up and went up the stairway and just as I got to the last step, there is a ladder there, four or five steps, we have a trap door to go through, and the trap door slammed down and knocked me down a flight of stairs. I got myself picked up. There were two men behind me, so I crawled up and went through the door and the smoke and flames were so thick I did not blame the fellow for letting the door fall on me; but I held it open to let the others go through. I don't know who they were. I started to holler to try and find out which way to go. I thought maybe some boss would have men stationed there to direct the men which way to go, because there were three roads out, the east and west runway and the main air course. I saw flames all over, but I did not know how far they extended. I thought maybe they would have somebody posted to tell us. Well, anyhow, when I hollered and could not get any answer from this side, I started up in this direction. I could hear men hollering and saw there were four or five cars, or whatever it was I can't say, were afire there right close to the bottom. When I got up there to this bunch of men, I said, 'Why don't you push through?' and he said, 'There are mules here.' I said, 'To hell with the mules; push through.' So we got over here to the left hand side, because it is the road that branches off, and I knew that if I went to the left hand I would not miss my road. I pushed ahead of them up to where the roads branch off. I saw some lights ahead of me and hollered for a light and they would not stop, and I started to run, and the faster I ran the louder I hollered for a light; I could not say how far I ran, but when I got pretty close to them the last man stopped and gave me a light, and I think came back here to this turn in the road, and got right close to the left hand side, because the way the air was I knew I couldn't hold a light in there; I could holler to the men and showed the light the best I could round the corner. As soon as they came up they got a light, and an old man and his son came up. I gave the

father a light first and then I gave the son a light and my own light went out. The son started to go on and I said, 'Come back here and give me a light,' because I was getting very weak myself, and I says, 'Johnnie, I can't stand here any longer, this smoke is getting the best of me; somebody else has got to stay here.' He says, 'I have two lamps.' So I took his lamp and pulled the wick away up and hung the lamp on the beam and hollered to come up and get a light and we could not hear any more voices, so we left. About half way up here both of us got in the dark again. His lamp went out during the time I was lighting the lamp hanging on the beam, and he says to me, 'You've got a good lamp there,' and just as he said that out it went; so we put our coats together and struck a match and got both lamps lighted, and got out here after running across a trip with a team of mules. We then went straight on and he says, 'Where are we?' I said, 'I don't know,' and started feeling round for the timbers. The timbers in the west bottom are square, and I could tell by them where we were. I says, 'We are on the bottom;' so we made down to the cage. When I came to the main bottom, Bundy and three or four more were standing there and he said, 'How is it?' and I said, 'The men can't get out of here, because they can't see. You should have lanterns strung along the road,' and he said, 'All right.' A cager had rung the bell to hoist the men. I got on the cage and went up. It was about twenty-five minutes to three when I was notified in my working place. It was a quarter to three before I got to the second vein at the bottom of the escape shaft."

John Stuckert, who had been a miner for thirty-five years, was secretary of the Cherry local of the miners, and who was working in the third vein, "At half past two we got smoke in our working place right off the air course. My partner is an Italian and I hollered to him, 'What are those fellows burning up there, anyhow?' So the smoke began to get thicker. He said in broken English, 'I guess we got to die like mules.' I paid but little attention. But after a while the smoke got thicker and I said, 'We better try and make the bottom and investigate what is going on.' We made toward the bottom, but we could not get on the bottom for smoke; the closer we got the stronger it was; we were driven back. There were six or eight of us going back and we got into my own working place. There were two entries, two roads and I went back to my entry. We waited a few minutes. One man said, 'I can see light on the bottom.' I said, 'If there is light on the bottom, it is clear; let us go out.' We went to the bottom and some fellow hollered down from the top that there wouldn't be any more doing today and we had better try and get out. I climbed up the escape to the second vein and there was a bunch climbed ahead of me and when arriving there I found fire and smoke. I tried to light my lamp and it would not burn. I waited four or five minutes in the smoke, then there was a bunch came up after me. When the next men came they did not know which way to go, not knowing the different roads and everything full of smoke. So one of them said to me, 'What do you think?' I said. You have to judge for yourselves. I don't know,' and they attempted to climb up further; they rushed up the escape and I followed, two men behind me and a man in the lead, and he hollered, 'For God's sake, get back quick.' I said, 'I am going to make for the old east runway,' where we go up in the evening. We hadn't got to the end of what they call the bottom when we were running into mules and empty cars and we had to crawl by the cars to get by the trip and there was a turn made then to the left; then we ran into another mule with empty cars. We traveled around until we came to the bottom. The smoke was awful thick. We had two doors to go through. When we got to the first door it was hard to open. I fell when I got the door open. One man came up and fell over us. He picked himself up and helped me up. And I stood back and I had hold of my own partner and he pulled me up to the next door and we got the next door open and got on the bottom. The smoke was so heavy there that it was like a vise holding you around the chest and taking your breath away. The man ahead held up and said, 'No further, boys, we are going to die here, and he was trying to pull me back. I said, 'No, friend, don't go back; I see only one chance for us to make the big bottom; if we can't make the big bottom we are lost.' He got away from me and all I remember is that he made a couple of steps back, but who he was or where he landed I don't know. I stumbled across the bottom the best I could. I held myself up once by putting my hand on top of a railing which helped me a little. I heard mules coming and men hollering among the mules and I crawled along the right side till I got right close to the bottom, then I was completely done and fell. At last I got up again and crawled a little more and I just made the bottom and fell on the cage. I never lost my presence of mind until I reached the top. I walked home and everything was a blank to me. After recovering I went back to the shaft and there was a crowd around there, and the mine was closed."

Alma Lettsome testified that he lived at Cherry, was married, and was 26 years of age and had worked at the Cherry mine since the 19th day of August, 1908. On the day of the accident he was working in the third vein; his attention was first attracted when the cars had stopped coming and he went out to the bottom of the big shaft, saw a driver standing there and said, "How is it they are not hoisting in the big shaft?" and he said, 'Probably they are waiting for the flats.' I paid no more attention and walked back in company with two other men to my working place. The three of us stayed down there together for I should judge about twenty minutes, when my son came along and told me the mule barn was on fire. He said, 'We have been up there and it is all afire.' I walked up the stairs and saw it and said we must get out as quick as we can. We were then about 750 feet from the escape shaft; we gave the men the warning that were around us and started up to make our way out. There were other men standing at the bottom of the third vein waiting for us to come out and we all started up the stairs, one man after the other. When we reached the top of the stairs there was a man standing against the trap door and he wouldn't go through it; he had lifted it up and seen the fire above and he said, 'We can't go through here, it is all afire.' I said, 'We can't go back, we have got to go through there.' He said, 'I can't get through,' and I said, 'Well, get out of the road.' I saw it was all on fire, in fact, all flames. We went through the door and south round the east way, reached the cage and went up to the top."

Among the many statements made, comprising nearly 900 pages of evidence taken, there was none more graphic, dramatic and clearer than that of Albert Buckle, a boy standing about 4 feet 6 inches high and who was 15 years of age, who worked as a trapper. Even his statement as to the number of cars of coal hoisted after the fire was discovered is corroborated by the check weighman, and the other incidents related by him are so completely corroborated that we give his story here as among the best, if not the very best, statement made of the affairs that took place on the main bottom.

His story is substantially as follows: "My name is Albert Buckle; my father's, Otto Buckle; he is dead; he died four years ago; my brother is Is and he is in the mine; my sister, 12; my mother, Mary Buckle, is sick. My uncle is Richard Schwartz and lives in Norfolk, Neb. I will be 16 on the 28th of November. I was a trapper. We ate dinner and then my brother came down and took a car in. He got a trip and came out in the entries and I opened the door and Matt says, 'There is a fire.' I said, 'Where?' and he said, 'At the third vein shaft.' I was in the east runway when I heard of the fire. I took my pail and set it down and Johnson, the mule boss, said, 'Bring your pails,' and we tried to get into the barn for water and we could not get in there for smoke. We could not get any water in the sump, we were too late already. The fire was burning in the main air course. Matt tried to get water with me and we tried to go through the doors (main air course), but the fire was there; I saw a car of hay burning and the timbers were starting to burn. I saw Rosenjack come running out to the main

bottom. He got a cage and went up. I saw Bundy, the diggers, cagers and spraggers at the bottom. I was sitting there playing and he said, 'Fire, come out.,' and I said, 'Oh, there is plenty of time,' and he said, 'There isn't time,' and the boss told us to get our water pails and get water. After the fire started there was five or six cars of coal that went up. At half past one the diggers came along and I got my pail and went to get on the cage and

the cager put me off and said, 'Get the pails and put the fire out.'

"I think it was George Eddy who told the drivers, 'We are going to put the fire out and go to work again.' I remained on the bottom for half an hour. We stood around there and they still hoisted coal. I think it was half an hour from the number of cars that went up. Johnson was running around opening and closing the doors and the smoke was getting strong. Dominic Christo told me that Andrew Timko would tell my brother and they went to tell the diggers to come out. My driver said, 'Bill, give us acage; every one is going to die here,' and he said, 'No, we are going to put the fire out and start to work again.' I said, 'You ought to notify them diggers inside that is working in there,' and he says to me to run and tell them. It was after that that I told Dominic. They were hoisting coal then with the main cage. Some parties went up for a hose. They got the hose, then put something over their faces and tried to get into the barn to fasten it, but could not get in. My driver said, 'Bill, if you don't give us a cage, we are all going to choke,' but after that he gave us a cage, for the smoke was too strong. As we were going up I hollered to McFadden to notify them diggers and he ran back."

William Maxwell testified that his home was in Spring Valley, but that he had been working for some time at Cherry, and that on the 13th of November he was working in the third vein in the southwest. He said: "I saw smoke coming in at the face and it got so mighty hot and thick that I got a little alarmed and came out to see the cause of it. I thought it was a sheet that had taken afire. I would judge that that was about half past two; it was all of that anyhow. I came out to the bottom; the smoke got thicker all the way. I couldn't see anything because of it until I came to the bottom and I saw there was one man with a hose putting out some burning hay that had fallen into the shaft. The car and all was in the sump. As I started to go up the ladder to go home some one said that the middle vein is on fire, so I went back after my son; he had been with me at the face of the entry. I went back to him and when we returned to the bottom there was nobody there then. We went up the ladder and up the stairway and when we reached the top at the second vein it took two of us to lift that door that you have to raise when you come up. After traveling that distance in that unlivable smoke you are not in very good shape to lift a heavy door made of sheet

iron which was about two feet square.

"After my son and I lifted it we came out, but two Italian men who followed us did not get out. They fell on the road between the ladders and the cage in the second vein. My boy dropped about 70 feet away from the cage; there were two parties that went down later and rescued him. I went on staggering to the cage and Mr. Rosenjack helped me on the cage and asked me if I could take hold of the bar myself and I said I could, so I came up alone on the cage. About six or eight minutes afterwards my son was brought up. I should judge that we were about the last that came out of the bottom vein."

Robert Shaw testified that he lived at Spring Valley, had been a coal miner for about ten years and that he went into the mine on the second Wednesday after the fire at about 2:00 o'clock. He said: "I went down in the cage to the second level and from there to the third vein. I had to slide down a rope 10 or 12 feet to reach the cage that took us to the third vein. There were four of us and when we got off the cage we stepped into water and walked for about 150 feet, I suppose. We went to the west side first, returned and hollered up and told them we were going to the east side;

we walked off and went to the first entry north, northeast is what they call it, I guess. We found men there; and also as we came in we found the canvass, all stuck up around the bottom and the rails stacked up to keep the air from going forward or so the air could get through it. We walked into three or four entries to the second switch and there found many dead men; beside them were three pieces of slate, one piece had marked on it the number of men that came up to this point in bunches. It was beside a fellow that was sitting up against the timber. There was one bunch of thirty-five; another piece of slate had marked on it twenty-three, etc.; that was the last bunch that came, I think; the figures totaled on these pieces of slate 168. The men were all lying right along the road to the left, to the right and to the straight. They were about 500 feet from the hoisting shaft. We counted forty-nine men and merely looked over the rest. They had constructed a fan like the paddle of a little steamer for the purpose of furnishing air for breathing; it was made out of boxes they had down there for their tools. It was about three feet in diameter. We found one bucket on the west side of the shaft with a piece of bread and a piece of cheese in it. The bottom was fixed with canvas to keep the smoke or whatever it was that came there away from them."

George Eddy testified that he lived at Cherry, was 48 years of age and mine examiner for the St. Paul Coal Company. He said: "At about 1:30 in the afternoon of November 13th last I was on top of the shaft sitting down there on the third vein engine house steps; the first knowledge I had that there was a fire was when I saw the smoke coming out of the shaft; I went right down on the first cage; the first thing I did was to ask one of the drivers to loan me his lamp and he said he had only one lamp; I said, 'Well, lend me your lamp until I go to the cupboard,' and we have some there, so I got a torch and went into the air shaft. Mr. Norberg was ahead of me; there was a car of hay on fire and it had caught the timbers in the lagging and Mr. Norberg says, 'George, the whole thing is afire.' I says, 'Yes, it is working on the roof.' So Mr. Norberg turned around and came back and I followed him out and before we got out somebody opened the two check doors. Then when we got through into the big bottom I went up on the west side to see if we could do anything about getting the fire out.

"I found some empty cars and a team of mules near the air shaft and hay on the other side; there was nobody in there but me and I came up to the big bottom to get some one to help me. There was nothing on the west side of the bottom, the flames were coming through there and I just took my torch and went inside to get all the men out I could. I went up on the second west to notify the men when I met the drivers on the parting and they asked me what was the matter; I told them to get out just as soon as possible, just as fast as they could and leave their mules and everything there and run. They all started out for the bottom and then I went into the sixth south entry. There are twenty-two rooms turned in that entry, but they are all finished up to eighteen. That is the first room working; I notified them and got them all out, came out again to the main entry and met John Bundy and told him the shaft is on fire, and he asked me where it was and I told him it was between the air shaft and the main shaft. him I had got all the men out there and he said I should go in and get these others to the south, so I went in and notified them and then I notified the men in the seventh and eighth south and then I met Mr. Waite and told him what was wrong, and he said you finish this entry and I will go in the nine and ten north, so we did that and met on the switch and we waited there until all the men came out.

"When we got the men all out ahead of us and got down to near the mouth of the entry, we could not get out; we were blocked in on account of the black damp and smoke; there were twenty-one men with us; we went back up the entry and tried to go out another road and we found the black damp was stronger there than it was where we were, so we went back into the

main entry again. Then we tried two or three times to get out on Saturday and Sunday, but we couldn't get out; every time we would try it we were further away from the bottom, so we saw that we were not going to get to the cage because the black damp was pressing us in from both sections and we knew it was going to fill up the face and that we would smother in there, so we went in and built a wall across the second west entry and we built across the first west entry of dirt and we were inside there seven days or until the rescuing party came for us."

RESCUE OF TWENTY-ONE MEN.

The story of George Eddy is particularly interesting, for his experience is connected with the gathering together of twenty-one men who walled themselves away from the fire and smoke by closing up an entry and living therein for eight days, after which they were rescued by parties who had ventured to go into the mine for the purpose of getting out dead bodies, but not expect-

ing to find any one alive.

These men were notified by Eddy on the afternoon of the fire, but after they had collected they could not reach the shaft, and after one man had died they were compelled to retreat to a distance where they could find an entry containing a living atmosphere. George Eddy and Walter Waite persisted in the attempt to find their way out. They all then spent the first night huddled together at a safe distance from the main shaft, hoping the fire would die out and that they would be able to make their escape, but the next morning they encountered black damp and had to retreat further back; George Eddy and Walter Waite made a desperate effort, but were overcome in the attempt. They decided that their only safety lay in walling themselves in until a change in the condition of the mine took place.

Here they remained with nothing to eat and very little water, for seven seven they had a light from Saturday, the day they were entrapped, until Tuesday, when their oil gave out. They were able, with the aid of their picks to dig a few holes, into which there run some water, but it was of so poor a quality that it was not of much value. Here they lived in hope and prayer that their lives might be spared and that they might be able to return

to their families.

The suffering which they endured from hunger, suffocation and the thought of their most certain death is almost indescribable. Here they dwelt in darkness and despair, writing notes to their loved ones, whom they had given up all hope of ever seeing again. At the end of a week's time they were getting in such a weakened condition that they knew they could not hold out much longer, so they agreed that the four who were the strongest were to make a last attempt to get out, even though they should die in their

efforts. This was on Saturday evening, November 20th.

It was in this attempt, as they struggled toward the escapement shaft, finding better air than existed before, that they encountered the rescue party, consisting of David Powell, mine superintendent of the Braceville mine; Father Hanney of St. Mary's church of Mendota, Ill.; Captain Kenney of the Chicago Fire Department and three other firemen. It was the greatest surprise to the rescuing party to hear voices of human beings in the mine, when they expected to find nothing but dead men. After coming in contact with these four men and after a most heartfelt and thankful greeting they lost no time in finding out how many there were and preparing for their safe deliverance and rescue. They soon run across four others who had followed the first four. Those who were left were not able to walk.

It would be hard for us to comprehend the joy and expectations that existed in Cherry when the news was spread that men had been found alive. Each one hoped that all would be found and that their own dear loved ones was among the rescued. Those who were rescued were: George Eddy, Walter Waite, Thomas White, John Lorimer, Frank Waite, Thomas Brown, John Barnoski, John Semich, George Semich, George Stimez, Frank Sanerania, Q. Antenore, Daniel Holafcak, William Cleland, Fred Lauzi, Slivatore Piggatti, Joseph Piggatti, Bonfiglio Ruggeri, Fred Prohaska and Frank Prohaska.

Daniel Holafick, the oldest man in the party, was not able to stand the ordeal through which he had passed and died the day after his rescue,

Sunday, November 21st.

The meeting of these men with their families and friends was a bright spot in the history of the dark days around the little village of Cherry, for they had been mourned as dead.

It encouraged the rescuing parties to search for others that might have so protected themselves, but no more were to be found. The others had died in their attempts to reach the escape shaft.

OPENING OF THE MINE.

Mr. McDonald arrived at Cherry on Sunday morning, November 14th, and says the main shaft was sealed up and the escape shaft partly sealed. The work of directing the relief and rescue was in charge of the State Mine Inspectors, and also mine experts from Urbana, and, later on, men from the United States Rescue Station at Pittsburg. Richard Newsam was directing this work. An effort was being made to enter the escape shaft, which was only partially successful.

On Sunday, the 14th, the main shaft was opened and two men with helmets were lowered to the second vein. They reported that with a sufficient supply of water and suitable hose they could have extinguished the flames, but the only available hose was so large and cumbersome and the supply of water, which was furnished by tanks on flat cars hauled from Ladd or Mendota, so inadequate as to seriously handicap the work of fighting the fire, and the men with the helmets were soon driven out and the mine sealed again.

Two days later the main shaft was opened again, and with the valuable assistance of the Chicago and Ladd firemen, who displayed great courage, the mine was again entered and the fire placed under control, temporarily, and the work of taking out the bodies began.

On Saturday, one week after the fire, some practical miners took charge of the rescue work, and by noon some fifty bodies were taken out, and at 1:00 o'clock some men were discovered alive and twenty-one taken out.

On the east side of the shaft at the second vein bottom, where the fire had burned out the timbers, an immense fall had occurred, which had fallen some forty or fifty feet high, and made it unsafe to get off the cage on that side, as the rock was continually dropping, making it impossible to explore that side of the mine.

On the west side the entries were standing about as well as before, but the black damp was so bad it was impossible to enter many of them without helmets.

The partings were blocked with loaded cars and dead mules, which were in such a state of decomposition as to make it almost impossible to get beyond them

After passing the first main parting in the south entry, we encountered a group of some ten bodies, one in the center in the attitude of prayer. From there on the sights were horrifying. Men's bodies, singly and in groups, were encountered, and the stench was such as to tax to the limit the strength of the rescuers.

A great deal was accomplished in rescue work during the day, but that night a number of the inspectors returned, and on Sunday a new mine mana-

ger was employed and the entire day was consumed in exploring certain sections of the mine and discussing theories among the so-called experts, and the work of rescuing bodies was, by their orders, practically discontinued. Fortunately the mine manager who was engaged in the morning resigned in the afternoon, and, after vigorous protests by the miners and the officials of the United Mine Workers, the work of rescue was resumed.

On the following day a meeting of the executive board of the Mine Workers of Illinois was held at Cherry, who selected a committee to visit the management and the inspectors to demand that steps be at once taken to explore the third vein, and to protest against the dilatory tactics employed, and volunteer their assistance in making the exploration. After some further delay a committee of miners were lowered into the third vein and reported finding all the men gathered in one group, where they had met death together.

During the entire proceedings much valuable time was consumed by those in charge discussing theories, and there is no secret of the fact that harmony

was a stranger between the State and federal forces.

There were too many bosses and apparently no one in authority. One of the experts made the statement a few days after the accident that the mine might as well be sealed up and abandoned entirely, notwithstanding the fact that twenty-one men were taken out alive some days later.

The miners' executive board finally appealed to Governor Deneen by wire to put some one in charge of the work, and registered a vigorous protest against the delay; but by this time the fire had again begun to burn more fiercely, and the mine was again sealed up and remained sealed until February 1, 1910.

On this date the concrete top that sealed the mine was broken and after thorough tests by the officials and experts, it was found that the fire had been smothered out. A party of men, headed by Richard Newsam and Thomas Moses, made the first descent into the mine and found the fire entirely extinguished.

Work was begun at once at removing the débris, falling timbers and numerous cave-ins through the direction of the above men and State Inspectors John Dunlop, Thomas Hudson, Hector McAllister and mine officials. Volunteers were called for and soon a large force of men were at work, but it was not until February 18th they could get far enough away from the main shaft to discern the bodies of the men they failed to reach before sealing the shaft. It was then that eleven bodies were found. On February 19th four more were found and on the 21st two more. On March 2d two more were found and on the 4th day of March sixty-one bodies were found huddled together, as if they had banded themselves together for mutual protection.

On April 10th thirty-one were found in a like manner, as it appears that they had met their death from the foul air and the poisonous gases. They had constructed fans out of 1x12 inch boards, mounted them upon mine props and they had turned them by the aid of mine machine handles. On one of the blades was written: "All alive—2 p. m., 14." Other bodies were subsequently found, until in all 251 bodies had been discovered August 1, 1910. There were probably eight remaining in the mine in some cave that has as yet

been unaccessible.

The second vein of the mine has been abandoned by the company and they will continue to work only the third or lower vein. The mine is at this date, September 1st, about ready for operation.

NAMES OF THOSE KILLED.

We herewith publish the names of those killed, as reported to us by the company, their check numbers, occupations, wages, age, nativity, residence, conjugal relationship, together with the names of the children left, if any.

CHERRY MINE DISASTER—

VICTIMS.

Check No.	Name.	Occupation.	Wages.	Age.	Nativity.
547	Amider, Alfio	Miner	 	18	Italian
				40	do
510	Alexius, Joseph	do		28	do
240	Atalakis, Peter	do		34	Greek
247	Agramant, rojani Alexius, Joseph Atalakis, Peter Atalakis, G Adakosky, M Armelani, Chas	do		39	do
191	Adakosky, M	Troolemon	80 56	18 32	do
	Armelani, Paul		2 56	33	do
86	Burke, Joseph	Miner		31	Irish
155	Bauer, Milce	do		43	German
110	Brain, Oliver	do		40	Scotch
25	Burke, Joseph Bauer, Milce Brain, Oliver Burslie, Clemento	do		34	Italian
289	Bolla, Antonio	do		24	do
108	Bastia, Mike	do		28	do
274	Brown, Thomas	do		51	English
170	Bolla, Peter	do		32	Italian
573	Bawman, Frank	do		28 31	Belgium
536	Rarozzi Antone	do		26	Belgium .do Italian
228	Bruno Edward	do		33	do
210	Bredenci, Peter	do		30	Lithuanian
191	Budzon, Joseph	do		30	Polish
169	Boucher, Jerome	do		39	Belgium
272	Bakalar, Geo	do		25	Slavish
17	Bolla, Antonio Bastia, Mike Brown, Thomas Bolla, Peter Bawman, Frank Bawman, Lewis Barozzi, Antone Bruno, Edward Bredene, Peter Bredene, Peter Boucher, Joe Boucher, Joe Bakalar, Geo Bayliff, Thomas	do		31	English
498	Bernadini, Chas	do		26	Italian
208	Bosviel, Adolph	do		33	
294	Budzom, Chas	do		30	Polish
44/ 560	Bertolioni, Tonzothe	00		22 34	Italian
579	Butilla August	do		32	do
309	Bordesona, Joseph	do		35	do
Co	Bernadini, Chas. Bosviel, Adolph Bodzom, Chas. Bertolioni, Tonzothe. Benossif, J. Butilla, August Bordesona, Joseph Betot, John.	Trackman	2 56	40	Lithuanian
Co	Brown, John Buckels, Richard Bruzis, John Bundy, John	Cager	2 56	33	
Co	Buckels, Richard	Spragger	1 40		German
Co	Bruzis, John	Timberman	2 56		Lithuanian
Co	Bundy, John	Mine manager			do
202		16			Tielle
480	Cionai Potor	m mer		23 24	Italiando
479	Canov Canivo	do		33	[do
451	Cioci, Canical	do		22	Ldo
415	Costi, Lewis	do		22	do
37	Camilli, Frank	do		36	French
585	Casserio, John	do		26	Italian
231	Cagoskey John	do		27 56	do Slavish
196	Costi, Angelo Ciocci, Peter Canov Canivo Cioci, Canivo Cioci, Caniva Costi, Lewis Camilli, Frank Casserio, John Castoinelo, Chelsto Cagoskey, John Chebubar, Joseph	do		32	Austrian
	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,				
572	Casollari, Ellzio	do		29	Italian
470	Comon, Heary			21	French
203	Cohard, Henry	do		34	do
97	Cipola, Mike	do		40	Slavish
105	Clark, Robt	do		28	Scotch
129	Carolari Diminial	do		28 40	Italiando
530	Cohard, Henry. Cipola, Mike. Clark, Robt. Carlo, Elfi Casolari, Diminick. Cavaglini, Chas	do		45	do
	Compasso, John			33	do
370	риазо, общ			00	

NOVEMBER 13, 1909.

VICTIMS.

Married or Single.	Children—Name and Age.	Residence.	Remarks
ingle		Cherry	
.do	m 0 1-1 0 - 1-	do	Widow and two children
larried	Teressa, 3; babe, 2 weeks	do	No particularsdo
ingle		Cherry	
farried	Albert, 5; John, 3; Edith, 2	do	Widow and three children
-do	Albert, 5; John, 3; Edith, 2 mos	do	Widow and five children
-do	Joseph, 2	Cherry	Widow and one childdo
.do	Rostrice 10: Wienie 6	do	Widow and two children
.do	Joseph, 2. Mary, 18. Beatrice, 10; Winnie, 6. Sidney, 6; Rolando, 3; infant.	do	
			widow and three children
darried	Marleo, 6 mos	Cherry	Widow and child
.do	,		Widow
.do	Marico, 6 mos	Cherry	Widow and child
ingle	August, 6	Cherry	Widow and child
do	August, 0. Josie, 9: Autone, 8: Teressa, 2. Annie, 2: Mary, 1. Satislar, 3: Joseph, 2. Amelia, 17 George 10 mos	Cherry	Widow
.do	Josie, 9: Antone, 8: Teressa, 2		Widow and three children
-do	Annie, 2; Mary, 1	Cherry	Widow and two children
-do	Satislar, 3; Joseph, 2	do	do
-do	Amelia, 17	do	Widow and one child
-do	George, 10 mos	do	do
-00	coln 1	do	Widow and two children Widow and two children Widow and child Widow and two children Widow and two children
.do	Child. 2 wks	do	Widow and child
-do	Clatilda, 15; Bertha, 15	do	Widow and two children
.do	Infant	do	Widow and child
-do			
farried	Annie, 9; John, 5; Sophia, 4 Mary, 2.	Cherry	Widow and four children
Single		do	
lother	Albert, 15; Lottie, 11	do	Mother and two children
fairied	Alfred, Amy, William, Flor- ence, Herbert, Ethel, Lin- coln, Edgar		
	coin Edgar	Cherry	Widow and eight children
Single		do	
.do		do	
farried	One child	Cherry	
linglo		-	
farried	Line, 3; Mary, 10 mos	Cherry	Widow and two children
··do · · · · · · · · · · · · · · · · · ·	John, 16; Andrew, 11; Mike, 7	do	Widow and three children
do	Line, 3; Mary, 10 mos John, 16; Andrew, 11; Mike, 7 Joseph, 7; Mary, 6; Phillip, 3 John, 1	; do	Widow and four children
Single	30ш, 1	Seatonville	
do		Cherry	
farried	Henry, 7: Marcal, 4: Paul 3	do	. Widow and three children
do	Henry, 7; Marcal, 4; Paul, 3 Mike, 9; Annie, 8; Andrew, 4	Streator	do
Single		Scotland	
do		Cherry	
		Italy	
	Jennie, 13; James, 11; Sam-		TT14 1 - 1 - 1 - 1 1 - 1
nanned	uel, 8	do	. Wife dead; three children
do	Jennie, 13; James, 11; Samuel, 8 Annie, 6; Frank, 5; Mamie, 4 infant 5 mos	do	wife dead; three children

Victims-

Check No.	Name.	Occupation.	Wages.	Age.	Nativity.
Co	Debulka, John	DriverMiner	\$2 56	27 49	Slavish
35	Donaldson, John	do		46	Scotch
7 38 58	Dovin, George Demesey, Fred Dumont, Leopold	do do do		18 29 33	Slavish
269 151 461	Detourney, Victor	-do		36 30 26 22	Italian French Slavish
Co Co	Durdan, Andrew Davies, Jno. G Flario. Miestre	Timberman helper Trapper	2 36 1 13	17 24	Italian
241 487 554	Dovin, George Demesey, Fred Dumont, Leopold Detourney, Victor Denalfi, Francisco Durand, Benjamin Durdan, Andrew Davies, Jnn. G. Fiko, George Fiko, George Erickson, Chas Erickson, Chas Erickson, Frie Fayen, Peter	-do -do -do		18 23 55	Slavish
Co 153 47	Erickson, Eric Farlo, John Fayen, Peter Forgach, John	Timberman Miner do	2 56	39 30 40 34	-do Italian French
	Forgach, John Fo mento, Dominick Freebirg, Ole Francisco, John			32 35	Italian
Co	Francisco, John	do	2 56	48	Austrian
Co Co 204	Francisco, August Flood, John Governor, Jno	Driver Merchant Miner	2 56	23 49 42	do
	Grehaski, Andrew			49	Slavish
187 528 531	Gugleilm, Peter Garletti, J Guidarini, Jno	do do do		34 29 41	ItalianItalian
586 493 486	Gialcolzza, Angone Garabelda, Jno Gulick, Joseph.	do		33 · 35 34	do
575	Gweltveri Telindy	do		28 19	Italian
	Garletti, Jno. Geckse, Frank Grumeth, Frank			20 34	Austrian German English
114 221 184 66	Gibbs, Lewis Halko, Mike Hadovski, Steve Howard, Samuel Hudar, Jno	Miner	2 50	34 28 28 20 45	English Slavish -do French Slavish
	Hynds, William			25 - 39	AmericanGerman
290	Halofcak, Dan	Miner		45	Slavish
216 413 Co	after. Harpka, Joseph. Hainant, August Howard, Alfred	-do	1 13	52 25 16	Austrian
16I 485 Co	Haipan, August Haipan, August Howard, Alfred James, Frank. Janavizza, Joe Jamison, James	Minerdo	2 56	20	Scotch

Continued.

Married or Single.	Children—Name and Age.	Residence.	Remarks.
Married	Infant	Cherry	
	Flenan, 21: John, 15: James.	do	Widow and eight children Widow and three children
Single	10	do	Widow and three cultures.
do		do	200
Married	Victor, 12; Julia, 9; Eddy 7 John, 6 mos	do	Widow and three children Widow and one child
do	Marsalle, 2	do	do
		do	do No particulars
d0		Cardiff	
do		I+oler	
do		Chorry	
do		Cherry	Widow, no children
Married	John, 8; Albert, 5; Andrew, 3;		
do	Louisa, 1	do	Widow, four children
Single		do	
Mairied	Peter, 22; Matt, 15; John, 13; Zony, 12; Mary, 10; Willie, 8; Veronica, 7; Jennie and Joe, 3		
	8; Veronica, 7; Jennie and Joe. 3	do	Widow and nine children
Single		do	
Married	Clara, 18; Martha, 16; Theo- dore, 14		
do	Boy, 16; boy, 12; boy, 3; girl, 20;		Widow and three children
do	Boy, 16; boy, 12; boy, 3; girl, 20; girl, 18; girl, 9 Mary, 8; Annie, 4	Cherry	Widow and six children Widow and two children
do			
do	Aldo, 11; Amelia, 9; Annie, 6; Antonia, 3. Minnie, 6; Phillip, 2.	Cedar Point	Widow and four children
Single		Italy	
Married	mo	Cherry	
		do	Widow mother and six children
do			Widow and two children in Aus-
			tria
Single Married		do	Widow, no children
do	Child, 6 mos	do	Widow and one child
Single Married	Annie, 14 Mary, 12; George, 6; Susie, 4; Lizzie, 2; John, infant		
. do	Marguerite, 2	do	
do	Marguerite, 2. Mary, 19; Susanna, 18; Teressa, 14; Louisa, 11; John, 7; Martha, 5; Hanna, 3; August infant	,do	Widow and eight abildren
Married	шаш,	, 00	
do			Widow and eight children Widow and seven shildren
Single		Cherry	Widow and one child
Married	Daiev 13	.ldo	Widow and one child
Single		.lOglesby	Father

Victims-

Check No.	Name.	Occupation.	Wages.	Age.	Nativity.
186 4	Klemiar, Thomas Kanz, Jno	Miner		55 42	GermanAustrian
127	Kussner, Julius Klaeser, Jno Klaeser, Jno Klemiar, Richard Kometz, John Krall, Alfred. Krall, Henry.	do		30	German
170	Klemiar, Richard	do		41 24	do
182	Kometz, John	do		53	Slavish
73	Krall, Henry	do		15 56	Polish
94	Kroll, Alex. S. Kenig, John Klemiar, Geo Korvonia, Joseph Kovoelvio, Frank Kovoelvio, Antone Kutz, Paul Kliklunas, Dominik Love, James Leyshon, Chas.	do		23	do
61	Kenig, John	do		42	Austrian
48	Korvonia Joseph	do		56 33	GermanAustrian
56	Kovocivio, Frank	do		38	do
444	Kutz Paul	do		21 33	RussianLithuanian
Co	Kliklunas, Dominik	Driver	\$26	24	do
171	Love, James	Miner		26	Scotch
288	Love, James Leyshon, Chas Lukatchko, Andrew	do		24 35	WelchSlavish
			1	26	do
492	Leptack, John Lonzotti, John	do		: 6	Italian
467	Love, Morrison. Love, John	do		31 34	Scotchdo
472	Love, John Love, David Leynaud, Urban	do		24	.doFrencb
533	Leynaud, Urban	do		37	French
512	Lonzetti, Seicomo	do		32	Italian
Co	Lurnas, Mike	Timherman	2 56	21	do
O	Leadache, Joseph	Trapper Driver Liveryman	1 13	16	Lithuanian
Co	Leadache, Frank	Driver	2 56	20	do
133	Lonzetti, Seicomo Lallie, Frank Lurnas, Mike Leadache, Juseph Leadache, Frank Lewis, Isaac Leadache, James	Miner		33 40	Lithuanian
	Mumetich, Hasan Miller or Malner, Lewis	do		20	Austrian
128	Miller or Malner, Lewis	do		19	do
l l				39	
305	Miller, Edward	do		33 43	Slavish
102	Mokoś, Joseph Meicora, Joseph	do		36	Austrian
32	Mohahan, James R	do		62	Scotch
280	Mills, Edward	do		44 54	English
549	Merdior, Arthur	do		26	Belgium
599	Mekles, Tonys	do do		32	Taolion
327	Maceoha Jno	do		52 26	.do
263	Maceoha, Jno	do		29	Engush
139	Mayelemie Frank	do		37 27	Lithuaniando
24	Masenetta, Anton	do do		25	Italian
34	Malinoski, Joe	do		26	
95	McGill, Jno , J	do		27 17	Scotchdo
551	Mills, Arthur Mittle, Jno Mayelemis, Frank Masenetta, Anton Malinoski, Joe McCandless, Robert McGill, Jno, J McCrudden, Jno. McCrudden, Jno	do		25	do
				48	do
172	McMullen, Geo	do	• • • • • • • • • • • • • • • • • • • •	24 18	. do
546	Mani, Joseph	do		. 56	do
0	Mayersky, Jno	Timberman	2 56	39	Slavish
	McLuckie, Andrew	do	2 56	31	Scotch

Continued.

Married or	Obligation Name and Ass	Destalance	Remarks.
Single.	Children—Name and Age.	Residence.	Remarks.
Married	Joseph, 6	Cherry	Widow and one child
do	Joseph, 6. Kathrine, 13; Killian, 12; Mar- guetrite, 7; Mary, 4.	do	Widow and four children
	guetite, 1, mary, 4	do	
do	Teressa, 10; Peter, 7	do	Widow and two children
Married	Mike, 19; Mary, 17; Susie, 14	do Streator	Widow and no children Widow and three children
Single	19, mar y, 11, 5usie, 14	Cherry	Widow and three children
Married	Eugene, 17; Selma, 12; Bernard,		
۵.	9; Edmund, 4	do	Widow and four children Widow and no children
do		Austria	Widow and six children
do	Charles, 14; Earnest, 10	Cherry	Widow and two children
do	Joseph, 9 mo	do	Widow and one child
do Single		do	
Married	Barlico, 3: Powla, 3	do	Widow and two children
Single		do	
Married Single	Jeanette, 4; Christina, 2	Scotland Wales	Widow and two children
Married	Amin. 12: Andrew. 6: John.	wates	
	Amin, 12; Andrew, 6; John, 4. Mary, 2.	Cherry	Widow and three children
do	Mary, 2	do	Widow and one child
do	Morrison 9: Jeannette 3	Scotland	Widow and two children
do	Morrison, 9; Jeannette, 3 Morrison, 10; Katy, 7	Cherry	do
do	Morrison, 4; John, 2	Scotland	do
do	Bertna, 13; George, 3; Marco, t	Cherry	Widow and three children
do		Italy	Widow and two children
Single		do	
do		Cherry	
do		do	
Married		do	Widow and three children
do	Katie, 22; Josephine, 17; Annie,	do	do
	10	do	
Single		do	
Married	Mary, 17; Joseph, 7; Annie, 6; Eva, 4; Frank, 2 Edmund, 7; Raymund, 5	do	Widow and five children
do	Edmund, 7: Raymund, 5	do	Widow and two children
do	Mary, 17	do	Widow and one child
do	Mary, 17. Joseph, 3; Cecil, 2; Mary, 3 mo.	do	Widow and three children
do	110	do	do
do	Edward, 9; Philip, 7; Alma	do	do
Married	Edward, 9; Philip, 7; Alma .do Anton, 5	do	Widow and one child
do	Olga. 1	do	-do
do			Widow
do	Designation of the second of t	Old county	Widow and one child
do	Doris, 6: Harold, 2. Mary, 7; Annie, 6; Susie, 3	do	Widow and three children
Single		d0	
Married			Widow and two children
Single		Scotland	
do		Cherry	
do	Monie 11. Doton C. Vothnino 4	do	
Married	Marie, 11; Peter, 8; Kathrine, 4 Margurite, 2. George, 2; Infant	do	Widow and four children
do	George, 2; Infant	do	Widow and two children
Single	T71 00 35-	(1)	Widow and two shildren
Marrieddo	Katie, 20; Mary, 4	Cherry	Widow and two children
	Joe, 6; George, 2	do	Widow and five children
do	John, 10; Jeannette, 5; James		
	Annie, 13; Susie, 11; Emma, 8 Joe, 6; George, 2. John, 10; Jeannette, 5; James 3; Andrew, 2; Wm. Tayter 2 wks	do	Widow and five children
Single	2 WKS	Spring Valley	widow and nive children
~	.,	. Tr. mp . and)	

Victims-

Check No.	Name.	Occupation.	Wages.	Age.	Nativity.
	Mazak, Jno. Matear (or Mactear), Wm. Norberg, Alex. Norberg, August. Ossek, Donaty. Ossek, Martin. Ondurko, Matt. Olson, Chas. P.		2 56 2 56	30 37 34 32 36 26 50	Swede
	Olson, Chas. P. Palmiori, Albert. Prusitus, Perys. Prusitus, Peter.			50 39 38	Italian Lithuanian do
	Pavoloski, Jno	do		27	do
198	Pressenger, Joseph	do		38	German
239 476 488	Prich, Joseph Pearson, Alex Perono, Dominick	do		38 30 32	Austrian Swede Italian
5.49	Papea, Chés Pearson, John Perbacher, Peter Packo, Andrew Pete, Ben Pshak, John	do		33 37 49 37 35 42	French. Swede. Austrian Slavish. Austrian Slavish.
Co	Pauline, Antona Repsel, Martin	Driver Miner	2 56	26 36	Austriando
57 19	Repsel, Joseph	do		29 33	do Lithuanian
414 504 423 321	Rolland, Victor. Rittel, Frank. Richards, Thomas. Ricea, Cegr. Riva, Joseph. Raviso, Joe Ruggesle, Gaijamyo. Rossman, Robert.	-do		18 37 21 30 27 25 17	Austrian Welch Italian
Co Co Co 55 22	Ruygiesi, Frank Rimkus, Joseph Robeza, Joseph Sopko, Cantina Speir, James	Driverdo	2.56	21 27 24 34	Italian Lithuanian Slavish Scotch
44 71	Stettler, HarrySandeen, Olaf	do		24 50	German Swede
111 132 62 473 474	Seitz, Paul. Shermel, Antone. Stark, John. Stanchez, Frank. Stefenelli, Dominick. Sarginto, August.	-do -do -do -do		34 36 35 30 39 25	Slavish
253 482 495 225 245 181 194	Siamon, Andrew. Semboa (or Sereba), J. Smith, John W. Sublich, Charles Suhe, John Suhe, Mike Suffen, John	do		24 46 32 17 44 39	Slavish

Continued.

Married or Single.	Children—Name and Age.	Residence.	Remarks.
Married		Cherry	Widow and three children Widow Widow and two children
do		do	Widow
do	Mae, 6; Dorothy, 2	do	widow and two children
Single Married	Donat C. Many 2, Albert 1	do	Widow and three children
-do	Benat, S, Mary, S, Amert, 1	do	Widow
do	Mary, 6: Verna, 5: Annie, 4:		
	Mary, 6; Verna, 5; Annie, 4; Matt, 2; John, infant	do	Widow and five children
Single		Cleveland, O	Widow and seven children
Married		Italy	Widow and seven children
do	Perys, 8; Tony, 6; Mike, 2; in-	Chonny	Widow and four children
a.	Pote C. William 7: Diamone C.	Cherry	widow and four children
do	Perys, S; Tony, 6; Mike, 2; infant 11 mo Pete, 8; William, 7; Blaygue, 6; Frank, 4 Rosie, 6; Mary, 2; Susie, 10	do	Widow and four children
do	Rosie, 6: Mary, 2: Susie, 10		1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1
			Widow and three children
do	Hilda, 6; Annie, 4; Walter, 3		
	mos	do	Widow and three children
do		Old country	WIGOW
Single	Mary 6: Toronh 4: Annio 9:	Old country	
- Hairieu	Potor	Cherry	Widow and four children
doob	Mary, 6; Joseph, 4; Annie, 2; Peter Lucy, 4; Kathryn, 6 mo	do	Widow and four children
Single		Sweden	
Married		Austria	Widow and six children
do	Andrew, 16: John, 14	Cherry	Widow and six children Widow and two children
16			
Married	Annie, 12; John, 10; George, 8 Mary, 4; Lizzie, 14 mos Antone, 1. Martin, 8; Lucy, 4; Barbara, 3	Chorry	Widow and five children
do	Antone I	- do	Widow and five children
do	Martin, 8: Lucy, 4: Barbara, 3		
	Antone, 1	do	Widow and four children
do	Antone, 1. Joseph, 2. Peter, 15; Mary, 9; Mabel, 8 Joseph, 6.	do	Widow and one child
do	Peter, 15; Mary, 9; Mabel, 8		Widemand from obildeen
	Joseph, b	00	Widow and four children
Married	Tohn 12: Martin 0	Cherry	Widow and two children
do		do	Widow
Single		Italy	
		Ch	
Single	Teressa, 13; Andrew, 10; Han	Cherry	Mother and five children. Fathe
	nan, 8; Marguerite, 4 John	do	Mother and five children Fathe
	2 W KS		and mother not living to
			gether
do		do	and mother not living to gether
do		do	
do			
Monnied	Alayandan 10, William 11, Iam		
Married	Alexander, 12; William, 11; Jen nie, 9; George, 7; James, 5 Elizabeth, 1 Herman, 2; Maria, 4 mos Roy, 17; Edwin, 15 Jennie, 12 Eyely 6		
	Elizabeth 1	Cherry	. Widow and six children
do	Herman, 2: Maria, 4 mos	do	. Widow and two children
do	Roy, 17; Edwin, 15 Jennie, 12	;	
	Evelyn, 6	do	No widow
do	Hattie, 3; Edward, 1	do	. Widow and two children
Married		Chomer	No widow Widow and two children Widow and three children
do do	Insenhine 2. Helen 3 who	· Cherry	Widow and two children
-do	observatio, 2, morein, o was	Cherry	Widow and two childrenFive children
-do	Androw 6: Martin 4: Mary	9	
	mos	do	. Widow and three children
do			Widow
	1-11 - 40 D - 40 DI V-	. Cherry	Widow and three children
do	Arinur, 18; Koy, 12; Phylias, 4	do	Widow and three children Widow and two children
Single	John, 4, Charne, Z	do	
Married	Tony, 9: George, 4	do	Widow and two children
do	John, 9; Annie, 5.	do	Widow and two children
	, ,		

Victims—

Check No.	Name.	Occupation.	Wages.	Age.	Nativity
308 312 282	Sukitus, Joseph Steele, Peter. Sarbelle, Julius. Stearns, James. Seitz, Edward.	do		30 24 28 40 28	Russian. American Italian American German
	Scotland, William			32	Scotch
251	Shemia, Jno	do		40	Austrian
Co	Stewart, Harry	Laborer	\$2 36	28	Scotchman
Co	Szabrinski, Jno. (known as John Smith)	Cager	2 56	29	Lithuanian
16		Miner		44 33 25 28	Polish Slavish do
315 Co Co 516	Finko, Joseph, Sr. Tinko, Steve. Tinko, Andrew Teszone, George Tatioli, Eugene	. do Spragger Timberman Miner	1 40 2 56	51 24 17 28 38	do do do Italian do
	Tonnelli, Emilia		}	30	do
431 478 503 Co 596	Turchi, Nocenti Tosseth, Frank Famsahanski, Joseph Tamarri, Pasquale. Tonner, John Ugo, Filippe. White, Geo. Welkas, Anthony Waite, Chas. Wyatt, Wm.	do do do Trackman do	2 56	31 29 28 25 47 28 54 31 42 35	do do do Scotch Italian English Russian English
149 211	Yurcheck, Antone Yacober, Frank	Miner		47 32	Slavish German
Co	Yannis, Peter Yagoginski, Frank	Driver	2 56	34	Polish
Co 5 148	Yearly, Joseph	do Minerdo	2 56	20 27 33	Slavishdo
497 265	Zacherria, Giatano Zeikell, Pat.	do		40 28	ItalianAustrian

Concluded.

Married or Single.	Children—Name and Age.	Residence.	$\mathrm{Remark}_{S}.$
Married	Joe, Annie, Mary	Russia	Widow and three children
Single		Streator	Widow and infant
Married		Cherry	Widow and infant
do	Henry, 5; Albert, 4; Willie, 2;	do	Widow and one child
	Lewis, 2 months	do	Widow and four children
		do	Widow and three children
	Mary, 12; Annie, 12; Susie, 9; John, 7; Andrew, 4; Emma, 2.	do	Widow and six children
	Henry, 7; Wdlter, 5; Helen, 4;	do	Widow and four children
	Eale, 2	do:	Widow and one child
Single	Antonia, 2 weeks	Spring Valley	Widow and one child
Married	Joseph, 6; Tony, 5; Mary, 3; Andrew, 2; George, 2 months Louis, 26; John, 14; Paul, 12	do	Widow and five children
do	Louis, 26; John, 14; Paul, 12	do	Widow and three children
do			
Married	Brogo 6: Mary 4	do	Widow and two children
do	Angel, 5: Dominick, 3: Annie, 2:		. Ido
			Widow and four children
Single	Amelia, b weeks	do	Widow and four children
Married	Armendo 2	do	Widow and one child
Single	I	Old country	
Married	D-d-1-1 to D		Widow
···(10 · · · · · · · · · · · · · · · · · · ·	Rachael, 17; Rose, 15	Cherry	Widow and two children Widow
do	Stanley 10	-do	Widow and one child
do		do	Widow and two children
do	Joseph, 4	do	Widow and two children
do	Mary 17: Appie 19	00	Widow and five children
do	Barbara 11: Frank & John 6:		widow and two children
	Mary, 4	do	Widow and four children
Married	Frank, 16; Mary, 13; Margu'		Widow and five children
	3	Cherry.	Widow and five children
Single		Spring Valley	
Married	Annie, 13; Mike, 11; John, 10;		
	George, 3 mos	Cherry	Widow and seven children
do	August, 8; Jennie, 2; infant	do	Widow and three children
	Antone, 3; Kudolph, 2; infant	do	Widow and three children

NATIVITY.

The nationality of those killed ranges as follows: Italians, 73; Slavish, 36; Austrian, 28; Lithuanian, 21; Scotch, 21; German, 15; American, 11; French, 12; Polish, 8; Swede, 9; English, 8; Belgian, 7; Irish, 3; Greek, 2; Welch, 2; Russian, 3. There are sixteen nationalities represented; 161 were married and 97 were single. There were 607 persons dependent upon them. This large number of people left either destitute or without any means of support attracted the attention and sympathy of the nation. Three of those killed were not employes of the mine but had volunteered their services in rescuing those below and were burned to death on the cage in the attempt. They were: Isaac Lewis, a liveryman: John Flood, a merchant, and Dominic Formento, a groceryman, all of Cherry. They each were married and left a widow and children.

Ages of the Children.

The following table shows the ages of the children by nationalities:

		Ages of Children.										of							
Nationality.	Un- der 1 year	I	2	3	4	5	6	7	8	9	10	11	12	13	14	Ov∈r 14.	Not re- port- ed.	Total	Nationality c
merican netrian leigian ngjish rench reman lish alian lithuanian olish cotch la vish wede	2 5 11 2 3 4 8	4 1 1 3 1 1 3	1 5 1 1 2 1 8 6 2 5 1 1	8 2 1 7 2 2 2 2 6 1	3 2 4 9 3 1 5 7	3 1 1 1 3 2 1 4 3 1	2 1 1 2 9 5 1 5 2 1	77111122	2 1 2 6 4 1 4	3 1 2 3 1 1 3 4	3 4 3	3	1 1 2 7 1	1 1 2 1 1 4	1 1 2	a4 b3 c4 d2 e3 f2 g5 h13 i2	8	1 54 9 14 10 34 1 69 40 15 43 87 6	1 1 2 1 1 2
Total	39	15	39	31	38	22	29	21	22	18	16	13	17	12	9	38	11	390	13

a One 15, one 16, one 17 and one 22.

b One 16, one 17 and one 18. c One 15, two 18 and one 19. d One 15 and one 20.

e One 15, on e 17 and one 22.

f One 16 and one 17.

g Two 15, one 17, one 18 and one 21. h Five 16, three 17, two 18, one 19, one 20 and one 26. i One 15 and one 17.

REPORT OF THE CHERRY MINE DISASTER.

BY THOMAS HUDSON, STATE INSPECTOR OF MINES, SECOND DISTRICT, GALVA, ILL.

This report covers incidents and occurrences which took place at the St. Paul Coal Company's mine No. 2, located at Cherry, Bureau county, Illinois, from November 13, 1909, when the fire started, until the morning of November 25, 1909, when both main and air shafts were securely sealed, and covered with concrete, to more quickly extinguish the flames known to be raging below in close proximity to the main shaft.

From the most reliable reports to be obtained at the mine, the fire commenced at or about 1:30 p. m., on Saturday, November 13, 1909. The place where the fire started, was at, or quite near the landing place, in the airshaft, at the second vein, where the coal from the third vein is hoisted through said airshaft and taken off the cage at the second vein, and hauled around to

the main shaft, recaged and hoisted to the surface.

The cause of the fire, from information gleaned at the mine, was, a pit car, containing five or six bales of hay, intended for the third vein was sent down the main shaft, and hauled around in the second vein to the air shaft landing above mentioned. This pit car, containing the hay, was placed near, probably directly under a blazing open torch, placed there to give light to the cagers, consisting of two men and a boy. The oil burned in this torch was quite likely kerosene, it is also very possible that some of the oil dripped from the torch and fell on the hay in the pit car, at all events, the hay is supposed to have caught fire from the torch, and certainly could have been easily extinguished, if immediate steps had been taken to do so. The car of burning hay, however, seems to have been pushed around from one position to another in an air current having a velocity of about 700 feet per minute, until it had fired the overhead timbers. The car containing the burning hay, was finally pushed into the shaft opening, and fell into the "sump" at the third vein, where it was quickly extinguished; but the heavy pine overhead timbers at the second vein were by this time on fire, and could not be reached because of the dense smoke; by this time the control of the fire was lost, and the result was the worst mine disaster of modern times.

Late Saturday night and early Sunday morning November 14, the mine inspectors of Illinois began to arrive at the mine. This force was augmented later by mine inspectors from other states; one came from Indiana, two from Ohio, two from Iowa and one from Missouri. Professional experts from Pittsburg and Champaign experimental stations, and about a dozen firement from the Chicago fire department, were also on the ground. During the day, Sunday 14th, two men from Champaign with helmets, succeeded in reaching the second vein through the airshaft in a sinking bucket, but could do nothing more as the smoke and steam were too dense for exploration. Both shafts were covered over and remained so during the night.

Monday, November 15: Men with helmets again descended the air shaft, they reported the temperature fairly comfortable but smoke and steam still too dense for active work. It was then decided to case the fan temporarily as an exhaust (the fan casing having been destroyed and the babbit metal

melted out of the journals, when it was reversed from a blower to an exhaust during the early stage of the fire) start the fan and attempt a descent into the mine through the main shaft. This was done, and the main shaft uncovered. The air shaft now became the upcast, and men wearing helmets went down the main shaft, the cages in this shaft being in good working order; when they got to the bottom, or second vein, they found the fire raging and were forced to return to the surface; the fresh air admitted by making the main shaft the downcast had started the partially subdued fire into a blaze. Both shafts were then covered over, and remained so during the night.

Tuesday, November 16: Both shafts remained covered over during the day, which was spent mainly in taking the temperature of the mine by lowering a therometer to the second vein, and in every case, the bottom of the main shaft at this vein was found too hot for work of any kind.

Wednesday, November 17: Temperatures were again taken and found to be about the same as on the day previous. A conference was held by the Inspectors of Illinois with those from Ohio, Iowa, Indiana, Missouri and the mining experts from Pittsburg and Champaign, also the representatives of the Coal Company. It was decided to again have men with helmets go down the air shaft; they descended about 9 p. m. and found the temperature more favorable and no fire in sight; of course men did not leave the sinking bucket in which they descended. During the night a "float" or temperary cage was constructed for use in the airshaft, should exploration work be again attempted from that point.

Thursday, November 18: The main shaft was uncovered late that day, and a line of hose put down to the second vein, and fire fighting in earnest commenced; this was done principally from the north cage as fire was blazing on the south and east sides of the shaft, which prevented firemen from leaving the cage. The men with helmets during the day went down the air shaft on the "float" and recovered one body that had been seen on a previous trip. Fire fighting was kept up constantly at the main shaft dur-

ing the night.

Friday, November 19: Progress was made, advancing on the west side shaft parting at the second vein; four bodies were found and brought to the surface. The Chicago firemen were in charge of the fire fighting below. The east and south sides of the shaft bottom were inaccessible, owing to heavy falls of roof and burning timbers, the west side of the shaft only being open. During the day explorers got around on the south entry, and then east to a point not far from the bottom of the air shaft in the second vein, but falls of roof had to be cleaned up, and repairs made in the timbering, this was ordered done during the night. In the evening after a conference, the Inspectors from other states and seven of the Illinois Inspectors remaining in charge. This action was taken because the inspectors considered that the company had a sufficient number of able men on the ground to take care of the situation.

Saturday, November 20: The fire was now seemingly under control, that part at least which was accessible from the bottom of the main shaft; the heavy falls of roof on the east side of the shaft, probably 35 feet high were

loaded out and the smouldering fire quenched as it was reached.

At 10:30 a.m., the three Illinois mine inspectors remaining over from the day before left the mine, urgent business in other parts of their respective districts calling them away; one of them having a mine explosion that had occurred the previous week, to investigate, by which, two shot firers had been killed.

It was shortly after noon on this date, when an exploring party found twenty-one men alive in the first west off of the main south entry. The imprisoned men had built "stoppings" thereby shutting out the foul gases from the fire, and depending on the purer air in the inclosed space to sustain life; they were at once removed from the mine, all but one recovering.

Telegraph messages were sent to all the Illinois inspectors and they hurried back to the mine; several of them arriving within a few hours. During the night explorations were made in the east entries off of the main south.

Monday, November 22: The exploring of the south section of the mine continued through the day, about 100 dead bodies were taken out of that

part of the workings.

Tuesday and Wednesday, November 23 and 24: On these dates the first northwest entries were explored, the face of the entries were reached but no bodies were found; it was learned later, that all of the men got out of this part of the mine; it was also found that there was no connection between the northwest part of the workings, where the exploration was made and the north part of the workings on the east side of the shaft, where many men were known to be at work the day the fire started.

While the explorers were in the northwest entries, smoke was found issuing from the main passageway which connects the west shaft parting with the air shaft, and which was closed by a fall of roof and a temporary stopping; the explorers in the northwest section were hastily recalled, when the temporary stopping was pulled down, and a stream of water from the fire hose turned in, and all signs of fire subdued at that point, and a more

substantial stopping put in during the night.

About 2 o'clock a.m., Wednesday, the 24th, a party of four went down into the third vein, on their return they reported from 3 to 4 feet of water covering the floor of the mine in the lower parts of the workings, and that they had found groups of men in the dry parts, all dead. Pumps were being made ready in the meantime to remove the water, partially at least, from the third vein workings so that the bodies could be recovered.

During the succeeding few hours, however, it was noticed that the fire from the south and east sides of the main shaft, was slowly encroaching on the shaft itself. Holes were cut in the shaft lining as high as 30 feet from the bottom, and streams of water thrown in behind the shaft lining; but the steam and smoke continued to issue from the openings cut and also from the sides of the shaft, in increasing quantities; to offset this a board stopping was built around the south and east sides of the shaft, and as close thereto, as the working of the cages would permit, and a stopping closed tight, near the bottom of the air shaft. The object of this was to deaden, or partially subdue, the fire thought to be burning between those points; this, however, was not entirely successful as the smoke from behind the shaft lining, which formerly passed to the east and around to the upcast or air shaft, was now carried to the west side of the main shaft, and the rescuers there practically driven from the mine.

A strong smell of coal smoke was noted indicating that the coal pillars were on fire, and as the gases given off by burning coal were known to be dangerous, great caution became necessary. Sometime shortly after midnight on the morning of Thursday, November 25, a consultation was held, at which, the President of the State Mining Board, chief of the fire department; expert helmet men from Champaign, the Illinois mine inspectors and representatives of the St. Paul Coal Company were present. The situation was discussed from every possible point of view, and it seemed to be the unanimous opinion of all present, that all of the men in the mine were dead; and the best way, looking to the recovery of the bodies later, was to seal up both of the shafts while they were in this condition, to be entered as soon as the fire was extinguished.

The sealing of the shafts was commenced early Thursday morning November 25th. A two inch pipe was inserted in the concrete cover of the main shaft, so that the temperature, pressure and condition of the air from the mine could be obtained at short intervals, and the exact conditions of the underground workings of the mine understood.

REOPENING OF THE CHERRY MINE.

Both shafts of the Cherry mine were securely sealed over with steel rails and concrete on the morning of November 25, 1909, and remained sealed until February 1, 1910.

During this interval, daily readings of the temperature in the main shaft had been taken, and were found to range from 123° on November 29, four days after the shaft was sealed, to 121° December 1; 93° December 10; 84° December 20; 74° December 30; 70° January 10; 68° January 20; 66° January 29, and the same on February 1, when the shaft was opened; this was assumed to be the normal temperature of the mine under existing conditions.

In the opening up the main shaft, an aperture about three feet square was cut in the concrete covering, just above the cover of the north cage, which had been left suspended directly under the concrete cover when the

shaft was sealed; the south cage had been taken off.

The same day this opening in the concrete cover, two men, Webb and Moses, wearing oxygen helmets, were passed on to the cage and lowered to the second vein. After an investigation around the bottom they were hoisted to the surface, and reported conditions just about as they were when the shaft was sealed up, except, no signs of fire nor smoke were visible, and the temperature at the bottom of the shaft normal and quite comfortable to work in. They descended a second time, and brought up a sample of air for analysis in which "black damp" or carbon dioxide predominated.

Late in the same afternoon, the concrete covers from both the main and the air shafts were removed, and the fan started up as an exhaust, that is, the fresh air was drawn down the main shaft and up the air shaft. It might be stated here that the Capell fan, which had been warped and twisted with the heat during the fire, had been taken away and thoroughly repaired and

again put in position and cased in a substantial manner.

After a short interval, to allow the fan to clear the passage or west "runaround" between the main and air shafts, two of the State inspectors, with safety lamps, descended the main shaft, and found a good current of air passing from the main or downcast, towards the air or upcast shaft. They returned to the surface and reported the mine in a safe condition for workmen with naked lights to enter, which they did, and during the night repaired and reinforced the brattice around the east and south sides of the main shaft, also commenced to clean out the west passageway or "runaround" to the air shaft which was found in a very bad and dangerous condition, owing to falls of roof broken timbers, etc.

It was considered, that the best and safest method was, to employ only a limited number of men underground, a number just sumicient to open up the west passageway to the escape and air shaft. After this road is opened and the air shaft put in order to take men out of the mine, an escapement or two ways out of the mine will be available. This will make men working below feel more safe, as it is not likely that fire can break out at both shafts at the same time. The cleaning out and retimbering of the west passageway to the air shaft continued to be slow and dangerous work impeded as it was, by heavy falls of roof. By a good ceal of hard and dangerous work, a small opening was made over, under and by the side of the falls in the west passageway to the bottom of the airshaft, and through this opening boards were taken and a "stopping" put in on the north side of the air shaft to prevent any sudden breaking out of fire from that direction.

Cleaning up and retimbering between the two shafts continued, care being taken to keep a close watch on all stoppings to prevent leaks or a sudden

breaking out of fire.

The body of a man that was known to be lying at the second vein landing at the air shaft was brought to the surface February 14, in a sinking bucket. February 5: A large steam pump was sent down the main shaft to the second vein. An extra covering of brattice was put around the east and south sides of the bottom of the main shaft at the second vein. The con-

crete was shipped away from around the collar of the airshaft, and a "float" put in, and suspended just below the surface, ready for carpenters to make

permanent repairs to the burned out portion of the air shaft.

February 6: The west passageway from the main to the air shaft was now cleaned out and securely timbered and open for the passage of pit cars. An entry is being driven in the shaft pillar around the north side of the main shaft and the heavy fall of roof on the east bottom, to connect again with the shaft bottom on the east side, inside of the burned out timbers and fall. This entry will give access to the east and northeast sections of the mine and to the air shaft by way of the west passageway. cleaning up the main south entry on the west side to recover rails, ties, pit cars and other material. The use of the cages in the main shaft were taken up most of the day by workmen making pipe connections for "steam jets" to throw water from the third vein to a tank located at the second vein, where it is taken up by the steam pump at the second vein and thrown The emergency cage at the third vein, main shaft, was to the surface. hoisted to the second vein and reduced to a size suitable to allow the steam jets to pass to one side of it.

February 7 and 8: Work in the mine was progressing slowly; cleaning up the south entry, west side; driving the entry around the main shaft and fall on east side, also fitting water and steam pipes in the main shaft for

pumps and injectors.

February 9 and 10: When steam was turned on to the injectors and pump the heat caused the pipes to expand, they were thrown out of line and were struck and broken by a descending cage. A concrete stopping was put in on the second east entry, west side, near the bottom of the airshaft.

February 11 and 12: The pipe line was repaired and started up but was broken again but repaired, and at 8 a.m. the 12th both pump and injectors were working steadily and doing good work. The entry around the main shaft was driven in 120 feet and has about 70 feet more to be completed.

February 13 and 19, inclusive: The work done during the week consisted in holding the entry into the main bottom, east side, and putting a concrete stopping across the main bottoms inside of the east opening, to the mule stables; cleaning up heavy falls of roof on the main north entry, east side, and in the east passageway or runaround to the air shaft.

Fifteen bodies were recovered during the week; all were found near where the new entry connected with the main bottom inside of the large fall

tnereon

The shaft timbers in the main shaft were again giving off considerable smoke and heat, showing quite plainly that the fire was smouldering behind them, and in dangerous proximity thereto. Pumping from the third vein was suspended until more brattice could be put around the bottom of the main shaft to keep back the fire.

February 20 and 21: The pump and injectors were still idle, as the steam given off prevents a close watch for fire being observed on the main shaft. Three more bodies were recovered on the 21st; they were found just outside of the second door going south in the east passageway to the escape shaft. The pumps and injectors were started again but shut down later, because of the smoke and heat from the shaft lining.

One more body was found on the evening of the 23d under a large fall

of roof, on the main north entry, east side.

February 24: Good work was being done in repairing the burned out lining and partition in the airshaft; in two or three days the work of putting in the burned out stairway from the second vein to the surface will be completed. The east passageway to the air shaft is cleaned up and retimbered and in shape for the hauling of pit cars.

February 27 to March 5: During the week ending March 5th cleaning up of the north entry, east side was continued, and sixty-five bodies in that

section of the mine were recovered.

It is quite probable that all of the bodies in the 2d vein have now been recovered, except perhaps some that may be covered up by "falls" on the shaft bottom or parting on the east side, or in the direct passageway, from

the shaft parting on the west side to the air shaft.

March 6 to 18: The northeast workings of the second vein, were quite thoroughly explored, and rails, pit cars and other material taken out; pumping water from the third vein was continued. An injector was put in at the air shaft, to raise the water from the third vein to the second and a pump was installed at the second vein to raise the water to the surface, both were working in a satisfactory manner. The water at the air shaft in the third vein was reported to be two inches below the "door heads" on March 9th; on this date, the main shaft was again giving off heat and smoke, so much so, that all of the men also two mules were brought out of the mine, and carpenters again put to work patching up the brattices. A wooden form was put around the east and south sides of the main shaft, and about six inches of sand bedded therein to shut off the smoke. The sand packing proved successful, the smoke being practically shut off. The injectors and pumps at both shafts were in operation, the water at the bottom of the air shaft in the third vein was nine inches below the door heads March 13.

March 13 to 26: There was not much work during the past two weeks except the pumping of water from the third vein. March 26 two and a half

feet of water was above the rail at the bottom of the air shaft.

March 27 to 29: The water was fairly well removed, a cage was prepared to hoist rock from the third vein to the second at the air shaft; large falls of roof were encountered both north and south. The pump at the third vein, bottom of the air shaft was started up and was working fairly well; this pump had been submerged since the sealing of the mine. November 25th.

March 29: Richard Newsam, president of the State Mining Board, and four State inspectors of mines, some of whom had been on duty continuously since the opening of the mine February 1st, went down from the second and the third vein on the emergency cage at the main shaft. They found about two and one-half feet of water at the cage landing; the shaft bottom, east and west, also the mule stables, where heavy, permanent timbering had been done were all found standing intact. After leaving the main bottom, however, large falls of roof were found; in fact, the entries around the shaft pillar, in every direction were practically closed. This condition required a great deal of time and labor, before the bodies known to be in the third vein were reached.

April 1 to 6: The work of cleaning up the falls in the north section of the third vein was continued. Connections having been made between the

main and airshafts, at the third vein.

April 7: Mine Inspector McAllister, mine manager Frew and John Fraser, a shift foreman, by climbing over falls, broken timbers and other obstructions, located the bodies of the men in the third vein. They were found at the end of the north air course, running direct from the bottom of the air shaft, just at the north boundary of the shaft pillar. Workmen were at once started to clean out the air course, north from the main shaft bottom, as this was the nearest and quickest way to reach the bodies.

April 10: One body was recovered from the third vein; April 11, thirty-five bodies were taken out; April 12, fifteen bodies were taken out, making

fifty-one bodies in all taken from the third vein.

The bodies of these men were found comparatively close together within a radius of not more than about 100 feet. According to the record of F. P. Buck, the clerk in the office at the mine, ten or twelve men are still missing, but as five men have been located, working at other mines, who were supposd to be lost in the Cherry mine, some of the missing men may be found in like manner. However, if any more bodies are in the mine, they will be found as the cleaning up process progresses.

The four State inspectors, who had been on duty by relays since the opening of the mine, February 1st, considering they could be of not further service, or not until the fire area should be broken into, left for their homes April 13, 1910.

OPENING OF THE FIRE AREA AND SECURING THE SHAFTS IN THE CHERRY MINE.

After the recovering of the bodies from the third vein April 12, about thirty days were consumed in removing the pit cars, track, timber and everything of value from the interior workings of the second vein, it having been de-

cided by the company to abandon that seam permanently.

May 14: After a narrow entry had been driven through the shaft pillar on the west side, to connect with the pump room an opening about 12 feet wide, and 70 feet in length, running from the south end of the main shaft to the stable in which the fire was known to be burning; another opening was made into the pump room, where a good deal of fire was in evidence, especially the coal "ribs" which were actively burning, but with an abundant supply of water, under a 300 foot head, and the necessary hose connections, the fire was easily kept under control, and the shale roof which had fallen to a height of fully 30 feet, was loaded into pit cars and sent out of the mine.

As soon as a sufficient space was cleaned, two sets of heavy timbers were set up, and on top of these "cogs" were formed and built up to the top, and

the roof secured.

The building of the "cogs" were most difficult and dangerous; difficult, because of the intense heat, which was more intense as the "cogs" were placed higher; and dangerous because of the unreliable nature of the roof,

large slabs of which fell or were liable to fall at all times.

The heat was partially overcome by putting a small air compressor into operation and carrying compressed air down the shaft in pipes and thence through hose to the men at work. As soon as sufficient space was cleared, and the roof temporarily secured by "cogging," a base for concrete dams or stoppings was formed by cutting down into the floor and into the sides of the opening or entry, and a concrete stopping built, quite close to where the pump room connected with the stables. The same methods described above were used in breaking into the fire area on the shaft bottom, east of the main shaft, and on the north side of the air shaft.

The conditions encountered were similar in each case, but differed somewhat in degrees; that is, more fire was found on the main shaft parting

than in the pump room and less north of the air shaft.

After the fallen roof had been removed from around both shafts, the work of thoroughly securing the same with concrete was commenced. On the east side of the main shaft a heavy wall or "backing" of concrete was built against the shaft timbers, and at right angles thereto; three walls of concrete one on each rib and one in the center were built to connect with a concrete stopping about 28 feet east of the main shaft. These walls are built to within about a foot of the roof, about 30 feet high, and across them are laid steel rails and wedges driven between the rails and the roof, thoroughly securing the latter.

Openings are left in the concrete walls around both shafts, to admit the passage of any one desiring to examine or inspect the walls and stoppings.

Practically the same methods as described above, are used to secure the south side of the main shaft, and the north side of the air shaft. The "old works" of the second vein are completely cut off from the main shaft by permanent stoppings and a new entry has been driven around the main shaft, and through the shaft pillar to the air shaft.

Through this entry, pipes are laid connecting the "rings" in the airshaft, which gives off abundance of water, with a concrete reservoir built near the main shaft at the second vein. From this reservoir the third vein will

obtain its water supply for fire fighting purposes. The distance between the two veins being 160 feet, the pressure due to the altitude will be about 80 pounds per square inch.

During the week ending August 13th, steel guides were put in between the second and third veins, new ropes put on and the cages running down to the third vein; and the cleaning up well underway. September 3, the cleaning up had progressed so far, that the coal face had been reached at five or six different points, and it is fair to assume, that by October 1, 1910, the mine will again be in a coal producing condition.

Note—On July 7th the body of a man was found about 10 feet north of the air shaft, under a large fall of roof. In regard to the number of men lost, and number of bodies recovered, the following statement was received from an official of the St. Paul Coal Company.

August 16, 1910	
Total number believed to be lost	267
Total number of bodies recovered from second vein	187
Total number of bodies recovered from third vein	51
Lost, by burning on the cage	12
Thought to be lost in the mine but found later alive and working at	
other parts of the State	11
Still missing, but whether in the mine or gone to parts unknown can-	
not at this time be determined	6
Dognootfully submitted	

Respectivity submitted, Thos. Hudson,

Mine Inspector.

II. THE PUBLIC'S RESPONSE TO THE NEEDS OF THE VICTIMS.

RELIEF.

After dwelling with the horror and suffering of victims that were caught in the mine we must turn to the heart-stricken widows and children, fathers and mothers, brothers and sisters who anxiously waited for those who never returned.

It was a pitiful sight to see those bereft ones linger about the hoisting shaft for days, scarcely taking time to eat or sleep, hoping and praying that those upon whom they were dependent might return.

One of the greatest difficulties which those in charge about the mine and in the village had was the pacifying and providing for those bereaved people.

The widows and children were, in many cases, left without provisions that would last for any length of time and, being mostly foreigners, had no relatives to fall back upon. They were clearly at the mercy of the public.

As is generally the case in an affair of this kind, the great need is for immediate relief. It takes some time to administer relief efficiently and systematically after it has been tendered. There were 160 widows and 390 children to be cared for. In some instances, a son was supporting a widowed mother and brothers and sisters. There were in all 607 persons dependent upon those who were killed in the mine.

Notwithstanding that there was some complaint at first from these unfortunates, there probably was never a case of this kind where relief was administered more promptly or where those in need were better taken care of than these people. Nearly every city and village in the State contributed in some way to their relief; the United Mine Workers, the Chicago Tribune, the Red Cross Society and the various secret societies and organizations were all early on the ground and the little village of Cherry was soon the recipient of the generosity of thousands.

It is hardly possible to state the exact amount of relief tencered the Cherry sufferers in dollars and cents, for a great deal was sent in merchandise; supplies having been sent in car loads and many organizations worked independently. From the best information that we are able to obtain the total amount of the contribution is \$444,785.92. The amount paid out by the company in settlements (July 11, 1910), approximately \$400,000.00, making a total of \$844,785.92 contributed to those left without support.

RELIEF COMMISSION.

A national relief commission, known as the Cherry Relief Commission, is organized for the purpose of distributing in a proper manner these contributions. The members of this commission are:

Judge L. Y. Sherman, Chairman, Springfield, Illinois, of the State Board

of Administration.

J. E. Williams, Vice-Chairman, Streator, Illinois, Streator Relief Committee.

Duncan McDonald, Secretary, Springfield, Illinois, United Mine Workers

E. T. Bent, Chicago, Illinois, Illinois Coal Operators' Association.

Ernest P. Bicknell, Washington, D. C., American Red Cross.
The following sum had been turned over to this commission on July 28, 1910:

American Red Cross	\$85,837	96
United Mine Workers of Illinois (by Duncan McDonald)	37,466	54
United Mine Workers of America (by Ed. Perry)	26,798	71
Streator Relief Fund (by J. E. Williams)	4,869	21
Mrs. James Spears (by Dr. G. Taylor)	1,000	00
Dr. R. A. Smith, Spring Valley, proceeds of a concert	243	40

This commission will also have, under the direction of the State Board of Administration, of which Judge Sherman is also president, the distribution of the \$100,000 which the State Legislature appropriated, making the total sum of \$256,215.72, which is to be distributed on the pension plan to the widows and orphans. Other sums are in the hands of relief committees of Oglesby, La Salle and Peru and will probably be turned over to this commission.

There is contained in the donations of the Red Cross many large contributions that should probably receive special mention. Among them is that of the Chicago Tribune, having raised \$41,041.78 for the relief of the Cherry sufferers. Through the courtesy of Mr. Kelly, general manager, we publish a statement of the contributions:

TRIBUNE RELIEF FUND.

1909. Nov. 15 Contributed by "The Chicago Daily Tribune" \$ 1,000 00

'rotal contributed\$41.041 78

Disbursed as follows:

CASH.

Total amount of checks remitted to C. D. Norton, Treasurer Red Cross Society, Washington, D. C.... \$33,687 03 Check to Bishop Edward W. Dunne, Bishop of Peoria... 2,500 00 Cash distributed by our representative in amounts of 50 cents and \$1.00 among widows and orphans at Cherry, December 1st 50 00 Total cash paid over\$36,237 03

Supplies purchased and expenses incidental thereto.....

TOTAL AMOUNT CONTRIBUTED.

The total amounts contributed, as near as we can learn, are as follows: At the disposal of the Cherry Relief Commission ... \$256,215 72
Contributions of St. Paul Coal and Mining Company ... 55,742 40
Death benefits paid by Mine Workers of Illinois ... 40,000 00 Expended by the Local Relief Committee of Cherry....... 33,968 91 Matthiessen & Hegeler Zinc Company 10,000 00 Congregational Church 10,000 00

Knights of Pythias	7,500	00
Bishop Edward Dunne	5,000	
Coal Operators	5,000	
Citizens of La Salle	4,292	
Slavish Newspapers	4,000	
Citizens of Oglesby	2,101	75

Total contributions \$444,785 92

Settlement made by St. Paul Coal Company approximately \$400,000. Total which will go to the support of the dependents, of which we have a

report, \$844,785.92.

The contributions of the St. Paul Coal Company consisted of money, pro-

visions, rents, coal, etc.

The death benefit of \$150 to the family of each miner killed, which was paid by the United Mine Workers of Illinois for 256 deaths, totals \$38,700, and other burial expenses will probably make the total \$40,000.

There was turned over to Charles L. Connolly, mayor of Cherry and who is ashier of the bank, the sum of \$33,968,91, all of which has been expended is administering relief. This sum was made up of hundreds of donors

representing amounts of from 50 cents to hundreds of dollars.

The Columbus Newsboys' associations of Columbus, O., is worthy of special attention, it having contributed \$1,720 to the local relief committee at Cherry. The United Mine Workers were among the first to come forward with \$5,000. The Hod Carriers' Union of Chicago contributed \$650. The Farmers' and Miners' Bank of Ladd, Ill., gave \$200. The rest of the contributions were made up of smaller amounts and represented nearly every vocation and calling and the generosity of all classes of people.

The amount raised by the employes of the Chicago, Milwaukee & St. Paul Railroad Company was also turned over to Mayor Connolly, as treasurer. Although a busy man, and especially so after the fire, Mr. Connolly deserves great credit for the valuable service he rendered during this calamity upon the little city and for the most excellent manner in which he kept the records of the contributions and in his careful distribution of them.

Thirty-one of those killed belonged to the Knights of Pythias and the family of each received the regular benefit of \$70. Those that belonged to

the local lodge received \$50 more.

The total amount of all contributions makes a per capita of \$1,717.32 for the death of each person killed. This, of course, does not represent the amount of cash each widow or family received, as much of this has already been expended in relieving their wants.

Including the contributions and the money paid in settlements by the St. Paul Coal Company there was a per capita of \$3,261.72 raised for each

person killed.

THE PENSION PLAN OF RELIEF.

There will be allotted to those people, however, through the National Commission, the sum of \$256,215.72, or an average of \$989.25 to each death. This sum will be distributed, however, to the dependents of those who were killed, each family receiving an amount in proportion to the number of dependents in a lump sum if a widow alone is left, or if the family leaves this country; but to the widow with children residing here it is paid on the pension plan, in amounts according to the number of children. A widow and one child under the age of 14 years gets a pension of \$25 per month until the child is 14 years of age or until they should, by the widow marrying or otherwise, become self-supporting. A widow and two children under the ages of 14 years gets \$30, and for each additional child \$5 more per month until the maximum of \$40 per month is reached. A widow with more than four children under the age of 14 does not get more than \$40.

To widows without children or with children over the age of 14 years a cash settlement is made according to the conditions peculiar to the family,

their ability to support themselves, etc., usually about \$300. The average age of the children left was $5\frac{9}{2}$ years and it is estimated that the fund on hand will support the dependents for eight or more years or until the children are able to work. Thus it will be seen that at all times—from the first the relief work was pushed with vigor and that the American people displayed in no uncertain manner their sympathetic generosity and big-heartedness. Food, clothing, medicines and supplies were sent from all parts of the country and were rapidly dispensed by the members of the charitable institutions on the ground, the value of which we cannot estimate. It was announced that on the 23d of November, ten days after the accident, \$31,-65,93 had been sent to the relief committee at Cherry.

The St. Paul Coal Company accommodated in the sleeping cars of the Chicago, Milwaukee & St. Paul Railroad from 150 to 200 men and nurses, and the dining cars were serving meals three times a day to the officials of the mine, mine experts, mine examiners, physicians, nurses, newspapermen and the workers. The company did all in its power to alleviate the suffering and distress. The homes in which the widows and children lived were turned over to their occupants and no rent was charged during the months of that winter. The coal which was used to heat those domiciles was also furnished. Even medical aid was tendered the sufferers for months

following the disaster. .

It seems that everything that could be done for the physical relief of those bereaved people was cheerfully performed in the hope that through this means they might partially at least help them to bear their sorrow.

Plans have not only been made for their immediate relief but, through the commission which has been established, a thorough businesslike systematic plan has been perfected for the care of those unfortunate dependents until they are able to care for themselves.

III. THE SETTLEMENT WITH THE ST. PAUL COAL COMPANY.

THE EFFORTS OF JOHN E. WILLIAMS.

Before the bodies of all the dead were recovered and while it was still uncertain whether all of them would ever be reclaimed or not, the people, whose sympathies had responded so promptly in the hour of Cherry's affliction, began to inquire, what is to become of the widows and orphans? The sending of special trains loaded with food, clothing and other provisions as an expression of public sentiment served very well indeed to relieve the pressure of immediate wants, but what of the future? The widows and children of the ill-fated men had to be taken care of in some way, but how? That was the problem, and while hundreds were wondering, the mind of John E. Williams was working, and out of it came a solution accepted ultimately by every interest concerned, in consequence of which ample financial provision is made for all the victims of the Cherry disaster, continuing until most of the children will be old enough to support themselves.

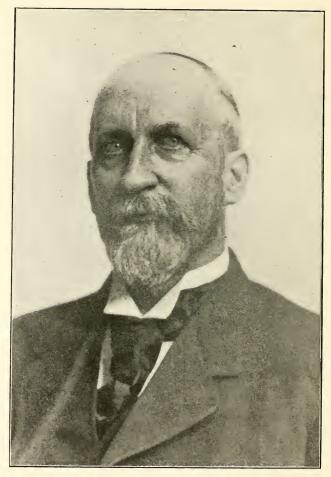
In an article contributed to *The Forensic Quarterly* for June, 1910, by S. B. Elliott, a fairly full and authentic account is given. It contains so much of the history of the settlement that the liberty is taken of incorporating it as a part of this report. It quotes sections of the English Workmen's Compensaion Act, upon which the settlement with the St. Paul Coal Company was based. It also contains a reference to the preliminary discussion conducted by Mr. Williams, forming as it did the ground work of all subsequent negotiations. The proportions of the self-imposed task are only partly shown in the complexity of conflicting interests that had to be reconciled, the character of the prejudices that had to be removed, and the tempting visions

of large contingent fees that had to be destroyed.

The situation was at all times critical, requiring the constant presence not only of a persuasive and persevering but of a controlling mastermind, and the artist possessing all these needed qualincations was on the job, the only uncertain element being whether the patience and self-interest of ordi-

nary men could withstand the strain.

When all the interests were apparently harmonized and success in sight, a break in some unexpected quarter would occur and with it would vanish the prospect of an adjustment, to be again revived by another effort. Behind all this time-consuming, patience-exhausting skirmishing, the crux of the main question remained untouched, for, as Mr. Williams states, up to this time neither the survivors had been pacified nor the company persuaded. To this greater question Mr. Williams focused all the power and influence of a well-trained and evenly-balanced mind. With a vision rare among men, through the tears and grief of a stricken people, he saw the lines of a new duty, the open doorway of a great opportunity, and succeeded in transmitting the materials of a tragedy into an instrumentality of immense service to mankind. Inspired by no other purpose except the weal of his fellow mortals this man for months disregarded the demands of home and business and in the ardor of a splendid consecration gave the wealth of his mental and spiritual endowments to a cause that absorbed all the energies of his active soul.



JOHN E. WILLIAMS, Streator, Ill.

"The self-appointed mediator," whose influence in the matter of the Cherry settlement made it possible for the "course of the world to be turned one way when it might have been turned another."

It is the writer's privilege to know nearly all the men whose cooperation were required to bring about the consummation of the plan. Mr. Albert J. Earling, the large-hearted, broad-brained president of the Chicago, Milwaukee & St. Paul Railway, whose comprehensive judgment and wide sympathies has done so much to destroy the force of the criticism directed against all corporations; John H. Walker and Duncan McDonald who, as officials of the mine workers' organization, were heartily in sympathy with the principle of compensation which the plan embodied; the consuls and representatives of foreign governments, and the attorneys for the company and the sufferers. While each are entitled to great consideration, the credit for the settlement belongs almost exclusively to Mr. Williams, and all familiar with the facts will so declare; this claim can be made for him without disparagement to any one. His ministrations brought the parties together. He paved the way and was the first to clearly recognize the possibilities of the situation.

By training and talent he is specially fitted for just such work, besides he was the solitary man whose motives could not be questioned. Neither the mine workers' union, representing the victims, nor the St. Paul Coal Company, with an investment of nearly half a billion dollars, had anything but good will that he would accept. He was not a hired agent; he came as one imbued with a high sense of justice, seeing in the wreck of an awful calamity a chance to emphasize, as Mr. Earling expresses it, a "principle of equity," and with a pleasing, pleading personality eventually won others to his view. There is a saving sense of satisfaction in the assurance that we still have with us men of such strong, helpful, altruistic character.

It speaks well for the present and future of the race, besides helping to remove the grounds for the accusation that all men's motives are mercenary and that the commercial demands of the age are such as to exclude all other

higher considerations.

There is a wide field for the exercise of such powers and the men who are able and willing to fully meet the obligations of this relation in life are now, and ever have been, the real kings of the world. The ceremony of fixing a date for their coronation may be dispensed with, for they stand already crowned and glorified. And to the immortals who are thus qualified to take their respective places in the "Choir Invisible," what a pleasure and a privilege it is to be to other souls

> "The cup of strength in some great agony" and then to live for evermore "In deeds of daring rectitude, in scorn For miserable aims that end in self In thoughts sublime that pierce the night like stars And in their mild persistence urge man's search To vaster issues."

AN EPOCH MAKING SETTLEMENT BETWEEN LABOR AND CAPITAL.*

[Reprinted from The Forensic Quarterly for June, 1910.]

"One of those solemn moments had just passed when men see before them the course of the world turned one way, when it might have been turned another."

In the face of the titanic movements of the universe that of late we have for a moment paused from toil or pleasure to realize, our world seems very diminutive. We have, perhaps, wondered if our planet counts for much, and we venture to think that for a few weeks at least, millions of mortals have felt anxiously insignificant. And yet, as we speak of the world's history, as we say—"One of those solemn moments had just passed when men see before them the course of the world turned one way, when it might have been turned another," a sense as of greatness comes over us, and that, not all spiritual, and be we, as planet or as mass of life, large or small, such moment is, to us, solemn.

The whole country heard of the "Cherry Disaster." The awful entombing of hundreds of men; the horror of the slowly suffocating, sealed in a burning pit. And yet, it was only one of the many coal companies that was wrecked; only a few hundred of the many thousand coal miners who were buried; a local calamity just as other calamities in this big country; an unnecessary horror caused by the stupidity of one mule-driver. The federal and state governments furnished various kinds of experts; troops were sent to save the crazed people from themselves; the Red Cross du its work; a relief committee was formed; money was subscribed, and the "shyster"

lawyers gathered like birds of prey.

There was a pause while the dead were buried, while the hungry were fed. then the shock passed and the world, drawing a long breath, went on its way leaving the wrecked corporation, the destitute widows and orphans to solve their own problem of irreparable loss, or bitterness, of antagonisms, of legal war between capital and labor. It was in this pause that a man, just one man, a looker-on, a one-time miner; who, because of his experience realized the present, as well as the possible future misery, to both sides, began to work. So quiet, so sane, so gentle, so patient was he that the crushed people, the wrecked corporation scarcely knew that he worked; not even the "shyster" lawyers suspected in him an enemy; he, however, fully realized them, and guided himself accordingly. Back and forth between corporation and claimants he went; he listened, he questioned, he advised, until at last, after a long and patient labor against seemingly overwhelming odds, he turned the destroying fire of the unfortunate mule-driver into a "refiner's fire," where the dross of all evil contentions, all bitternesses was burned away and only the pure gold of loving-kindness, of Christ-like compassion was left.

^{*}This article is a compilation patiently made by Miss Sarah Barnwell Elliott from letters, reports and official statements, with the least possible editing, as it was felt that in this case "scissors and paste" would be of more public service than "Pegasus."

How he did this is the point of this summary.

He found that the total number of killed was about 270.

Total number of widows, 160.

Total number of children, 470; of these, 407 were under 14 years of age;

by law, too young to work.

After careful calculation he decided that besides what had been given by the Red Cross, the United Mine Workers, the State of Illinois, and the gentral public, a half million of dollars would be needed to care for these dependents in any permanent way. Also, he decided that the St. Paul Coal Company, owner of the Cherry mines, was the most promising source of help.

He then made a study of resources of this corporation and found that the mines of the St. Paul Coal Company, "capitalized at \$350,000, fully paid in, were opened and operated especially to supply the Chicago, Milwaukee & St. Paul Railroad with coal," . . . "that without the trade of the Chicago, Milwaukee & St. Paul Railroad they would be curtailed of their market, and with the hostility of that road be practically valueless." "That if the claimants went to law . . . fought through to the

Supreme Court, . . . that if a judgment against the company were affirmed, . . . if the property were sold to satisfy this judgment the company could go through bankruptcy or go into the hands of a friendly receiver" . . . "that if, under the circumstances, the property could be sold for its full value, and there were no other creditors, it would yield about \$1,000 apiece to the claimants."

He then asked, "Could it be sold for \$350,000: "The stock being owned by the Chicago, Milwaukee & St. Paul Railroad, any friend of that road could and would, at a forced sale, bid in the property," no one daring to bid against him because, as it was expressed, "No one could affora to have the mines as a gift, if in so doing he incurred the hostility of that road-for in that case he could not expect the trade of that road, and could expect no other!"

But suposing the sale at full value; first, the legal expenses would have to be paid; then the sums due for rescue work; then for repairing the mines. To sum up the losses:

Forced sale in an unfavored market.

Enormous legal expenses.

The cost of the disaster. What then would be left each claimant?

After this summing up; after bringing home to all, that though the Chicago, Milwaukee & St. Paul Railroad, a \$400,000,000 corporation, owned, practically, the St. Paul Coal Company, yet beyond the resources of the St. Paul Coal Company, there was no legal liability for the Cherry disaster. Then the problem had to be met: "What other recourse had they?" The selp-appointed mediator asked the president of the great railway company this question: "What other recourse have we?" And the president "met the question squarely" by answering: "We acknowledge a moral obligation." "This statement . . . was the keynote of all the subsequent proceedings."

Up to this time, the self-appointed mediator had proceeded on his own responsibility; now, he reported all his findings to the relief committee and asked their opinion. At once and unanimously, the committee put itself on record as "favoring meditation as the best possible solution of the Cherry situation . . . and the greatest precedent for the future that it would be the privilege of any body of men to establish."

At once they saw "before them the course of the world turned one way,

when it might have been turned another."

The next step was the basis of settlement. In company with the three chief officials of the United Mine Workers, the self-appointed mediator called upon the president of the Chicago, Milwaukee & St. Paul Railroad-President Earling-and submitted to him "two plans of settlement, one by a commission appointed by the President of the United States; the other, a proposal to settle on the basis of the English Workmen's Compensation Act."

"Of the two proposals suggested the one that found the most favor was the proposal to adjust the claims on the basis of the English 'Workmen's Compensation Act.' Some of the consuls were very warm in their commendation of this idea, and suggested that a clearer and fuller knowledge of the law should be obtained. A copy of the Act was procured, and extracts bearing on the Cherry case and on the 'Employers' Liability' in general, are here given."

Workmen's Compensation Act, 1906.

"Be it enacted by the King's most Excellent Majesty, by and with the advice and consent of the Lord's Spiritual and Temporal, and Commons, in this present Parliament assembled, and by the authority of the same, as follows:

"1. If in any employment personal injury by accident arising out of and in the course of the employment is caused to a workman, his employer shall, subject as hereinafter mentioned, be llable to pay compensation in

accordance with the first schedule of this Act.

Provision for Arbitration.

"2. If any question arises in any proceedings under this Act as to the liability to pay compensation under this Act (including any question as to whether the person injured is a workman to whom this Act applies), or as to the amount or duration of compensation under this Act, the question, if not settled by agreement, shall, subject to the provisions of the first schedule of this Act, be settled by arbitration, in accordance with the second schedule to this Act.

SCALE AND CONDITIONS OF COMPENSATION.

"The amount of compensation under this Act shall be:

"1. If the workman leaves any dependents wholly dependent upon his earnings, a sum equal to his earnings in the employment of the same employer during the three years next preceding the injury, or the sum of one hundred and fifty pounds, whichever of those sums is the larger, but not exceeding in any case three hundred pounds, provided that the amount of any weekly payments made under this Act, and any lump sum paid in redemption thereof, shall be deducted from such sum, and, it the period of the workman's employment by the said employer has been less than the said three years, then the amount of his earnings during the said three years shall be deemed to be one hundred and fifty-six times his average weekly earnings during the period of his actual employment under the said employer.

IF NO WIDOW IS LEFT.

"2. If the workman does not have any such dependants, but leaves any dependants in part upon his earnings, such sum, not exceeding in any case the amout payable under the foregoing provisions, as may be agreed upon, or, in default of agreement, may be determined, or arbitration under this Act, to be reasonable and proportionate to the injury to the said dependants.

"3. If he leaves no dependants, the reasonable expenses of his medical

attendance and burial, not exceeding ten pounds.

"4. Where total or partial incapacity for work results from the injury, weekly payment during the incapacity not exceeding 50 per cent of his average weekly earnings during the previosu twelve months, if he has been so long employed, but if not, then for any less period during which he has been in the employment of the same employer, such weekly payment not to exceed one pound.

AVERAGE WEEKLY EARNINGS.

"For the purpose of the provisions of this schedule relating to 'earnings' and 'average weekly earnings' of a workman, the following rules shall be observed:

"1. Average weekly earnings shall be computed in such manner as is best calculated to give the rate per week at which the workman was being remunerated. Provided, that where by reason of the shortness of the time during which the workman has been in the employment of his employer, or the casual nature of the employment, it is impracticable at the date of the accident to compute the rate for remuneration, regard may be had to the average weekly amount which, during the twelve months previous to the accident, was being earned by a person in the same grade employed at the same work by the same employer, or, if there is no person so employed, by a person in the same grade employed in the same class of employment and in the same district.

MONEY INVESTED BY COURT.

"5. The payment in the case of death shall, unless otherwise ordered as hereinafter provided, be paid into the county court, shall, subject to rules of court and the provisions of this schedule, be invested, applied, or otherwise dealt with by the court in such manner as the court in its discretion thinks fit for the benefit of the persons entitled thereto under this Act, and the receipt of the registrar of the court shall be a sufficient discharge in respect to the amount paid in.

"8. Any question as to who is a dependant shall, in default of agreement,

be settled by arbitration under this Act."

PAYMENT OF INJURIES.

"In addition to indemnity for death the law also grants for disability a weekly payment during such disability not exceeding 50 per cent of his average weekly earnings during the previous twelve months, such weekly payment not to exceed one pound." The law provides compensation for disability by diseases that can be shown to grow out of the occupation."

"The next step was a mass meeting of the widows at Cherry, where a committee of conference was appointed, of which the self-appointed mediator was made a member." It is impossible to tell of all the conflicting interests and purposes; of the tremendous difficulty of uniting them on any plan that would avoid litigation. The survivors had to be pacified, the company had to be persuaded, for the sum asked in settlement was not a small amount.

To give figures, the sum settled on by the St. Paul Coal Company as being "the most" that could be paid for settlement, was \$250,000 and a "moral obligation" felt by the controlling railway company, while the sum settled on by the sell-appointed mediator as necessary from the corporation was \$500,000. How could he get this? How "transmute a moral obligation into its financial equivalent?" As the self-appointed mediator writes, "It was by no means a simple matter. For if we took any arbitrary sum as the measure of indemnity, just as good arguments could be urged for a larger sum. If we suggested \$1,500, the largest sum up to that time paid in a large disaster, some one with equal force could urge \$2,500, or \$3,500, or \$5,000.

"And then the obligation was not all on one side. The powerful head of a \$400,000,000 corporation is by no means a dictator. He is allowed his power only because his stockholders believe he will use it to their mutual advantage. If he acknowledges a moral obligation it must be such a one as they can be brought to sanction and approve. He must satisfy his own sense of right, he must meet the reasonable moral expectation of right-

thinking men, and he must do it in such a way as to secure the approval and support of those who paid the bills, and received neither publicity or reward for their contribution.

"I shall never forget the memorable interview at which the many angles of this complicated question were made clear to me. It was at an interview with President Earling. It was my part to urge with all the fervor and eloquence at my command the moral demands of the situation; it was ais to listen and decide. In two hours of sincere, earnest, and fervent discussion I presented my cause from every conceivable point of view. Mr. Earling listened, weighed, and considered patiently, and met every point with a sincerity, earnestness and fairness equal to my own. Where he agreed, he admitted it frankly and gladly; where he differed, he did it courteously, kindly, almost regretfully. I felt I was in the presence of a man who felt the grandeur of a great moral issue, and who was weighed down by the burden of a heavy, an almost tragic responsibility. But he could not at that time reconcile himself to my solution of the moral problem. He had fixed his mind on a sum that was \$100,000 less than my plan called for, and it seemed to him better that the claimants should 'take the property' rather than grant the sum that my proposal seemed to demand.

"I left his presence chastened and discouraged, but not the least doubting the sincerity and moral earnestness of the man whose responsibilities were so much greater than mine. The interview was not without its fruits, however, for a few weeks afterwards I was summoned to a conference of representatives of the various interests, at which Mr. Earling adopted in substance the principal of the proposal I had previously made. That principle is well known to readers now, being the principle of the English law which gives for each accidental death the equivalent of three years' earnings. The proposal was accepted by consular and other interests, and settlements with the Cherry claimants are now in process of being effected on this basis. Mr. Earling did me the honor to say that my words had been the means of convincing him of the wisdow of adopting the English precedent in the settlement of the Cherry problem, and I am proud of the honor; but it is his own broad mind, big heart, and strong will that has put the plan into execution, and given it a reality in the world of fact that will make it go down into history as the most potent and significant result of the greatest mining tragedy in history.

"I am tempted to add just a word of an impression left on my mind as the result of my unusual contact with one of our great over-lords of commerce. It is this: That corporations are endurable or possible only because of the great humans who are behind them. In themselves they are soulfess abstractions, existing only for the economic purposes, But they must have men to run them, big men, strong men, and you can't find a man big enough for the job unless he has a great 'human heart' and plenty of rich, red, blood in his veins. Down below you may find automata, man machines; but at the top you must have a 'live wire,' a real man, and not all the corporation machinery in the world can grind the human sympathy, the human interest, out of him. Without him, the barricades, the red flag, the reign of terror; with him, perhaps the evolution of the corporation into the Hope of the Ages. Let us dare to have faith. At least so much has my brief contact with President Earling enabled me to do."

So much for the self-appointed mediator's view of Mr. Earling, president of the Chicago, Milwaukee & St. Paul Railroad; let us see now what Mr. Earling thinks of him, of this sane, wise, patient J. E. Williams. Mr. Earling thinks of him, of his sane, wise, patient J. E. Williams. Mr. Earling says:

"DEAR MR. WILLIAMS-Your letter of April 16th, with the enclosure accompanying it came to my office during my absence in the east.

"It is better, in view of all the interests, that the facts concerning the Cherry settlement be given to the public. There is no one so well qualified to give them as yourself, and, while I have a natural disinclination to publicity, I cannot be otherwise than glad that you have published this statement, and with it there is a deep measure of personal appreciation of the

more than kindly treatment you have accorded me.

"No one could have gone to Cherry in its hour of disaster without being profoundly impressed with the futility of mere legal remedies. The machinery of the law never could have fed the hungry or clothed the naked. No corporation worthy of receiving from the State the right to transact its business could have closed its treasury in the presence of hunger and destitution simply because no legal responsibility rested upon it to furnish food and clothing. At such an hour as that the question of legal rights and duties become insignificant as compared with the impelling call of humanity, and corporations are as human as the men who compose them.

"I hope no question more appalling or more difficult to solve will ever come to any corporation than that involved in doing justice to the survivors at Cherry. There were two survivors of that disaster, the bereaved and stricken people, and the ravaged corporation. Again the impotence of the law was emphasized. All the law could do was to take the wrecked and shattered property, and divide it as best it might, through long and tedious delays and expensive and wasting processes. This meant the complete loss of the property to its owners, and, in the end, but little, if any, alleviation of the suffering of the survivors, or mitigation of their poverty. It was evident from the outset that the best relief which the law could afford meant only added disaster for the survivors at Cherry, and absolute annihilation for the company. It became, therefore, of the highest importance to all that some basis of settlement should be arrived at which would give quicker relief than could be obtained through legal means, and which would be within the financial limits of the property involved.

"I think it is probable that the company and a considerable number of the survivors could have come to view the principles that are involved with substantial unanimity, but I am convinced that whatever might have been the disposition to arrive at a settlement, just on the one side, and equitable on the other, nothing could have crystalized the details into a final result

as did your patient, earnest and disinterested meditation.

"It was difficult at the outset to understand such unselfish devotion to the cause of humanity. There are many motives which lead men to champion one side or the other in any controversy. There are many ardent advocates of one side or the other, but no other instance has come under my observation of a man with the capacity to help, coming voluntarily to the aid of contending parties, with an equal eye to fair dealing for both and justice for all. I think I am justified in saying that without your skillful and intelligent meditation the settlement at Cherry would have been as far

off now as at any stage of its negotiation.

"I am glad that the Cherry settlement bids fair to be an epoch making event in the relations between employers and employed in this country. All those who had a part in bringing it about must, of necessity, have their share of credit for its result, but, above and beyond them all, no single factor of as much importance as your own undaunted persistence in the face of circumstances that so often seemed hopeless. If, out of the wreckage of property and tombs of men at Cherry, there shall come forth a permanent bettering of the relations of employers and employed in the hours of their common disaster, it may be counted as some small salvage from so awiul a calamity. And, so far as it contributes to the welfare of humanity and the advancement of commerce, it shall stand as a monument to your unfaltering effort to establish among men a lasting principle of equity and justice.

Very truly yours,

"Albert J. Earling."

The reader who has reached this point will wish to know something of Mr. Williams. He is a one-time coal miner; he was secretary of the first miners' union; was first miners' check-weighman in Streator, Ill.; has been for twenty-five years the manager of the Plumb Opera House in the same town. With the Hon, Lyman Gage and Colonel Rend of Chicago he

arbitrated the Coal Run strike, and later organized and was president of "The Business Men's Auxiliary League," which helped the miners to carry on the strike of 1897. He is now a business man; is chairman of the "Cherry Relief Committee" of Streator, and the "Self-Appointed Mediator" who has not seen "the course of the world turned one way, when it might have been turned another," but who has turned it. For, " . . . hardly has the Cherry settlement taken effect when its principle is adopted. . . . The International Harvester Company, employing 25,000 people, has voluntarily come forward and offered its employés an indemnity contract based on the same terms as the Cherry settlement, namely, three times the annual wage in the event of accidental death. It waives all question of 'negligence,' or legal liability, and makes the simple fact of death or injury sufficient ground for indemnity. . . . " "But the influence of the settlement does not end here. The press dispatches bring the news that the Wisconsin legislature, through its committee, has recommended a bill containing the same essential features—three times the annual wage as indemnity for accidental death. And information has come that the commission appointed by Governor Deneen, one of whom was a Cherry mediator, is seriously considering the same, or a similar measure."

Up to date, May 11, 1910, "the amount paid by the St. Paul Coal Company in settlement of claims is \$400,000. About forty claims are still unsettled, mostly single. About \$75,000 will be required to rehabilitate the mine."

President Earling was "converted" from "\$250,000 as being the most that he could bring himself to pay" to the above amounts. Mr. Williams' comment is: "Best of all, he rejoices in his conversion. . . . The doing of the good deed changes the scale of values, and makes the good man feel the result to be worth more than the sacrifice."

RELIEF FUND FACTS.

Over \$400,000 was raised by the Red Cross, the United Mine Workers, the State of Illinois, the coal operators, and the general public. This will be administered by the Cherry commission, which is constituted as follows:

Chairman, Hon. L. Y. Sherman, representing the State of Illinois; vice chairman, J. E. Williams, representing the general public; secretary, Duncan McDonald, representing the United Mine Workers; member, E. P. Bicknell, representing the Red Cross; member, E. T. Brent, representing the coal operators.

"In view of the fact that the coal company's payment was made 'flat' to each widow, regardless of the number of children, we have thought it best to make our fund go as far as possible for the benefit of the children."

PLAN OF RELIEF.

"Beneficiaries are divided into two classes: those having children, and those without. Widows and others without children will be apportioned a payment ranging from \$300 to \$500, which will be paid to them direct as a final contribution. Widows with one child will be paid \$20 per month; with two children, \$25 per month; and so on, increasing \$5 per month for each child until \$40 is reached, which is the maximum payment.

"Our calculations are that our funds will enable us to pay these pensions until one or two of the eldest children in the family reach the age of 12 years, the age the law fixes as the earliest age they can be permitted to work. They will then be able to help support the family, and the pension

will stop except in exceptional cases."

Down to that spring day outside the walls of Jerusalem, when the Sacrifice of the World was offered up, there had been but two classes: the tramped-on and the trampler. From that Cross of the Carpenter, watched by fishermen, came the light, that increasing through all the ages, has gradually revealed to men the highest, deepest, truest meaning of love—"as thyself."

What might be called the chief characteristic of the fair races, has been fair play until today it has, because of these controlling races, become more or less the idea of humanity. It was from this standpoint that the "self-appointed mediator" worked. From that older fair race across the water he called the law (based on "as thyself"), and we, the children of that race, will answer to the call—must answer to the call. Not only a few corporations, but the federal government must see to it that, as in England, so in this country it shall become the law of the land.

IV. INDUSTRIAL ACCIDENTS—COMPENSATION VS. LITIGATION.

The American Mining Congress, at its late session at Los Angeles, Cal., adopted a resolution which, while general in its terms, clearly commits that body to the principle of legislation favoring certain definite compensation in the case of industrial accidents. This is a pronounced forward step and is the more significant when the fact is recalled that a decided proportion of the delegates represented large employers of labor whose cooperation is essential to secure such a needed reform in our present law and practice. It not only attests the humanitarianism of the men who have their capital invested in legitimate mining, but expresses their business sense in an organized effort to dispense with the unjustifiable waste that marks every attempt to adjudicate accident claims under existing law and to substitute for it a plan, inexpensive and easy of inforcement, that will place the responsibility where it properly belongs on the whole industry and that will consider fairly and treat equitably every interest represented in the great mining industry of our country. It is unfair to the employing interests that they should be made the subject of interminable legal assaults in which designing lawyers play upon the gambling instincts of injured men in the hope, seldom realized, however, of obtaining fabulous rewards. It is no less unfair to thrust upon the injured man or his dependent family the entire burden of the loss sustained by accidents, a great per cent of which, as our statistics show, is the result of trade hazard for which neither employer or employe can legally be held liable. The purpose of the policy approved by the resolution adopted at the Los Angeles convention is to save the money now squandered in useless litigation and give it, under proper regulations, to those who may be injured while in the line of their employment as compensation, in part at least, for the suffering and loss of earning power sustained; and the compensation thus provided to be recognized as a proper liability of the business and to be charged against it like all other legitimate costs. The wonder is that the American people with all their indomitable energy and enterprise are not the leaders in this, the most important conservation movement; as it is, we have the example of twenty-one foreign governments, any one of which might be accepted as a model for our conduct. This is the only civilized nation in this respect that persists in its adherence to an out-grown, obsolete legal policy.

Our faith is still anchored in fees and certain precedents considered more

important than principles.

The legislature of Montana, at its last session, enacted a law, effective December 1st, this year, authorizing the levying of a tax of 1 cent per ton on all coal mined and sold in that state for the purpose of providing a fund from which to compensate those injured in connection with the coal mining industry. The New York legislature, upon the recommendation of its Commission on Employers' Liability, enacted two laws, effective September 1st this year, one optional, the other providing compensation for accidents occurring in certain non-competitive industries. The Illinois Commission created by Act of Special Session, 1910, partly on account of

the awful disaster at Cherry, reports to Governor Deneen, under date of September 15th last, the results of six months' investigation of the subject. Unfortunately, the members were unable to agree upon a measure While the employers on the Commission were favorable to a compensation act, certain of the labor representatives, while not opposing the plan for compensation, felt that it should follow and not precede a comprehensive employers' liability law. Because of this division of opinion the Commission adjourned without recommending any particular bill. While the failure is regretted, it does not relieve the forthcoming Legislature from the responsibility of squarely meeting the issue, in fact, the dominant political party in its platform pledges its candidates for the Legislature to do so; besides, the valuable data collected by the Commission and in corporated in its report will prove of great service in the task of formulating a law on the subject. Several other states, notably Wisconsin, Minnesota, Michigan, Ohio, New Jersey and Massachusetts have commissions now engaged in the work of proposing changes in present employers' liability laws, the reports of which will be submitted for the consideration this winter of their respective legislatures.

While in full sympathy with the purpose back of the efforts of such commissions their conclusions or recommendations necessarily depend upon legislative approval which, if granted, certain selfish interests will probably attack in the courts, thus rendering indefinite the time when such remedial measures will become effective. Anticipating the ultimate enactment of laws requiring compensation in all cases where employés are disabled by accidents occurring in the line of their work, would it not be advisable for associations of employers, in conjunction probably with that of their employé, to put into immediate operation, by voluntary agreement, a plan that would fully dispose of the legal contentions resulting from industrial accidents?

After an experience of more than half a century with Hugation growing out of personal injury claims, founded on statutory or the common law theory of negligence, the system, judged by its results, has failed. Whatever justification the principle may have had in the earlier and simpler stages of our industrial evolution, any further attempt to apply it to the complicated conditions of the present day must be attended with greatly increased embarrassment to the courts, taking up their time to the exclusion or delay of more legitimate business; to the denial of simple justice to injured workmen or their dependants, and to the ever increasing annoyance and expense of employers who, in many justances in self-protection, are compelled to contest suits of that character. Employers are familiar from experience with the nature of the customary defenses interposed against the successful prosecution of claims of that nature so that it is unnecessary to discuss the rules of contributory negligence, assumed risk, the relation of fellow-servant and other doctrines proclaimed from time to time by the courts. They are also familiar with that class of insurance organizations which, in consideration of a fee that is never earned or dissipated in expenses that should never be incurred, agree to relieve them in part from the legal consequences of an accident for which an uninformed jury may hold them responsible. The situation created by our failure to do even handed justice has made it seemingly obligatory on the part of many to seek protection in the nature of liability insurance. That, too, has miserably failed; first, because the protection is incomplete; second, because real responsibility cannot be permanently and successfully transferred; third, because the injection of a foreign interest, usually without conscience, having no particular concern for the rights or interests of employes, intensifies friction and widens the gulf between them and their employers, and fourth, because the plan is organized for private or corporate profit, maintained at great expense, for salaries of officials, agents, solicitors, engineers, attorneys, etc., constituting a severe tax upon the industry, the smallest fraction of which ever finds its way into the homes of injured workmen. This plan, like the legal practices under which it has been developed, now

stands condemned, and the task of this moment is the substitution of a system that will remove on the one hand the requirement for a suit in the civil courts, and on the other the necessity of depending for protection upon

insurance companies as at present organized.

The only proposition to consider is that of substituting for the present expensive and wasteful plan the policy of compensation under which the victims of industrial accidents would receive in the case of all injuries a definite sum equal under many existing laws to one-half wages during incapacity; and for fatal accidents, in case of the head of a family, the aggregate of three years' average earnings. There is nothing new or revolutionary in such a scheme. It has long been the settled policy of more than a score of foreign governments, some of them adopting it over a quarter of a century ago.

This policy is based on the sound economic theory that the losses sustained by workmen from accidents received in the line of their employment is a legitimate tax upon the industry responsible for them and that the earning power suspended or lost in consequence should in part, at least, be recouped out of the profits of the enterprise and charged against the business in the same manner as breakages, depreciation of plants and other

unavoidable costs of production.

Mining people as a class may have been deterred from adopting a compensation plan, under the impression that the vanishing margin, which unlimited competition has left in the way of profits, makes it impossible for them to assume it. This conclusion may have been formed without fully

considering the expense of present methods.

A prominent manufacturer in this State, for his own information, recently checked up his casualty accounts for a period of nineteen months; somewhat to his surprise he discovered that the amount required to compensate all his employés who were injured during that time (on the basis of the English compensation law) comprised but one-fifth of the premiums he had paid for accident insurance during that time. The aggregate value of the total coal product of this State for 1909 was over fifty million dollars; that for the entire country being six hundred fifteen and three-quarters million dollars. The addition of nine-tenths of 1 per cent to the estimated valuation would be sufficient to allow the payment of one-half wages to every mine worker for time lost on account of injury, and two thousand dollars (\$2,000) to the families of all those who were killed during that year.

Because of certain laws, employers are not yet in a position to protect themselves against the frightful and inexcusable waste incident to our whole competitive system, but present restrictions need not prevent the inauguration of a policy in relation to accidents, such as that herein suggested, which, even on present valuations, assuming the cost would be as great or greater, would carry with it the comfort and satisfaction that whatever sums were paid out on such account would go directly, and, what is equally important, immediately, to those who are most entitled to receive them.

The practice and the law should unite with ethics in requiring that the financial loss caused by injury to a workman should not be imposed upon him alone, but shared, as far as can be, by the society receiving benefits

from his labor.

Certain employers contend that to provide compensation for accidents would operate as a direct inducement to carelessness, and that instead of less there would be more casualties. Fortunately, such opinions among employers are rare and it is enough to say that the experience of foreign countries, working under compensation laws, show without exception that the accident rate has been reduced to such extent, in fact, that their records are offered as examples for our emulation.

In the matter of industrial accidents the purely legal question as to where the personal responsibility rests should not be considered at all, because it is not, strictly speaking, a personal affair, for the reason that in extra hazardous occupations, like that of railroading, coal and metal mining, and construction work, accidents occur chiefly as a result of the inherent dangers of the calling, making it impossible in most cases to determine the question of negligence as defined by the law. Our difficulties in these respects are but multiplied in the foolish attempts to apply a legal theory that can have no logical or reasonable relation to the existing industrial situation or to our new social concepts of the real duties and responsibilities of men.

A capable and distinguished judge of this State, having a long and varied experience in the trial of personal injury suits, declares he could write in ten minutes a fair and comprehensive law on the subject of employers' liability. A simple act comprising a few lines requiring evidence of the fact that an injury has been sustained by a workman while in the course of his employment, and the earning time lost on that account. These few words clearly define the basis upon which accident claims are to be adjusted, the balance is merely detail. Eliminating the disturbing issue of negligence, there would be no longer a basis for quarreling over whether the employer is liable or not. The only question likely to give rise to a difference of opinion is in partial disability cases, the degree of which has to be determined, and the time of the courts need not be occupied in such hearings, as those matters are adjusted by commissions organized for that purpose.

Some confusion exists in the minds of workingmen regarding liability and compensation laws. This is shown in the attitude of certain labor leaders who oppose all plans proposing compensation until a comprehensive em-

ployers' liability law is enacted.

A law providing compensation for injuries is a distinct liability law without the uncertainties that inevitably attach themselves to any pro-

ceeding under a general liability act.

To the extent of the amount required to be paid on proof of any accident, compensatory legislation not only determines specifically the extent of the employers' liability, but, what is equally important, avoids the waste of time and loss of money incident to recovery under any other system of liability practice.

Every statute attempting to define employers liability is essentially based on the legal idea of negligence. Wholly aside from the particular defenses which the rulings of the courts allow, there can be no recovery under a general liability act, except on proof of negligence on the part of the employer. Under such a procedure, with any kind of a law, the burden of furnishing evidence in support of the charge of negligence is upon the party seeking to recover damages. There can be no escape from this obligation on the plaintiff's part, and the record of litigated cases show only too frequently how lamentably has been the failure to supply the needed evidence and this, too, in cases where neither the doctrine of fellow-servant; contributory negligence, or assumption of risk had been pleaded or allowed in defense.

While in a few cases under the general law there has been recovered and sustained judgments in damage suits for considerable sums of money, the amount of the judgment recovered in the average case is scarcely equal to the expense required to defend it. After a careful investigation, Mr. S. C. Kingsly, of the National Conference of Charities, discovered that in fifty contested cases, where the claimants were successful in dodging every legal technicality, the aggregate amount recovered was \$8,749, or an average of \$175 for each. In the adjudication of the claims in the case of the Cherry disaster, founded, as it was, on the English compensation act, fifty families received an aggregate of \$90,000, or an average of \$1,800 each. If the real concern is for the welfare of the families of injured workmen, surely there can be no good reason for hesitation in the matter of a choice between the two systems. One offers a definite amount paid directly without the expense or intervention of agents or attorneys; the other presents the skeleton of a hope—the prospect only of a long delayed law suit with the final result always uncertain. The hoped for millennium is still far off. We are forced to deal with men and situations as they are, not as we would wish them to be, and in legal, as in other contests, with rich and powerful interests, the injured workman, with his damage claim represented by a contingent fee lawyer, finds himself at a disadvantage when pitted against the trained corporation attorney. In no other way can the increasing number of verdicts for the defendant be explained. It is incredible to suppose that the workman who performs all the labor, assumes all the risks, and suffers all the pain will consent to a further continuance of an unequal contest.

In respect to mining accidents the number as between coal and metal mines is quite evenly distributed, those of a fatal character exceeding three in every thousand employés in each class of mines. Public attention, however, has been directed chiefly to accidents in coal mines on account of recent frightful disasters, in some of which more than half a thousand lives have been lost at one time.

The great loss of life in the mines of West Virginia, Ohio, Pennsylvania, Illinois and Colorado within a period of two years, with a proportionate loss in our metal mines, although not so extensively advertised, imperatively demand that everything possible be done to diminish the number of accidents and to care for their victims in a human and business-like manner.

Every calamity brings in some form its compensation. These terrible experiences may have been required to arouse in men a true sense of their responsibility to their less fortunate fellows. The devastating floods that destroyed the city of Galveston ten years ago made necessary the commission form of government for cities, a system which, beginning with that wrecked municipality, is now spreading over the country presenting the last hope of escape from the blight of municipal corruption. If, out of the wreck of industrial accidents, the results of inevitable dangers, there shall come reasonable laws recognizing in a broader way the rights and interests of all men, some atonement will have been made and the lives of our workers shall not have been offered in vain.

STANDARDS OF COMPENSATION FOR SICKNESS, ACCIDENT AND DEATH.

[Sherman C. Kingsley, Superintendent United Charities of Chicago, in the Survey of September 3, 1910.]

On Saturday afternoon, November 13, 1909, a torch, carelessly exposed and a bale of hay started a fire which caused one of the most dramatic mine disasters in industrial history, and cost the lives of Andrew Dovin and 257 fellow workmen. Thrilling rescues by a heroic band of men who finally perished in an act of supreme sacrifice and heroism; sealing the shaft in the presence of an ineffably pathetic group of women and children; the recovery of revolting human shapes; the rescue of twenty-one men buried alive for eight days, all this for weeks kept the press of a great city, indeed of the nation, pulsing with stories of intensest human interest. The pulpit took it up, so did teachers in the colleges. The imagination and sympathy of the public were profoundly stirred. More was written and said, thought and felt, about Andrew Dovin and his comrades, their wives and children, than perhaps about any equal number of people who suffered a disaster while pursuing industrial duty. This publicity acted with compelling and persuasive unction upon the employing company, the giving public, city councils and the State Legislature. In this conspicuous respect, the wives and children of Andrew Dovin and his fellow victims were most fortunate. These men died a congregate death in a disaster that was dramatic, thrilling, spectacular.

On Saturday, November 14, 1908, one year before this disaster, an ambulance backed up to No. 17 Bond street, the home of Abe Miller. Abe was in the ambulance. He was a worker in a steel mill. Together with other men, he was burned in handling hot metal, receiving injuries which resulted in his death. The only newspaper mention of Abe's case was a three line statement in a list of accidents, giving his name, address and the nature of the case. The company settled for \$500 and promised permanent employment to Abe's wife. She went to work and her inadequate earnings were supplemented by charitable relief. The circumstances of Abe's misfortune are fairly typical of fifty other fatal accidents of which information was obtained through charitable organizations in ten of the largest cities

of the country.

I want to consider the information about these fifty accidents, which occurred at a time in commonplace obscurity, and to contrast the circumstances of the wives and children of these men with what happened in the way of compensation and relief for the wives and children of Andrew Dovin and forty-nine other victims of the Cherry catastrophe. My object in making this comparison, as I have indicated before, is that the circumstances of the Cherry victims were studied for weeks by the Red Cross, miners' unions, city councils, the Legislature, associations of business men, magazine writers, charity workers, indeed the whole public. What should be done for the families of these men was deliberated perhaps more fully than the circumstances of any other equal number of accident cases happening in years.

The schedules sent to the ten societies called for the following information: 1. Income conditions in the families before the accident. The man's age,

occupation and wages.

2. Nature of the accident. How he was killed. Insurance, if any. Gift by employer and damages recovered.

3. Conditions in the family after the accident. The vacant chair. Shrinkage in income. Kind of employment secured by wife and children. The new adjustment.

While returns were made in 100 cases, I shall have more to say about the fifty which were fatal. The families of these fifty men, having obscure, one-at-a-time accidents, received in compensation \$8,749-\$187 a piece. fifty Cherry families received from the company \$90,000-\$1,800 a piece.

In the case of Cherry, on account of the publicity and activity of the Red Cross, the press, business associations, the fifty families received in contributions, from the Legislature, miners' unions, etc., \$87,000 making a total of \$177,000; in the other, the families received \$8,749 plus an uncertain and indefinite amount in relief and pensions from charity societies, and a still more indeterminable amount from institutions, nurseries, hospitals, etc. In the case of the fifty other victims, we have tried to indicate some of the

sources of help which were added to the \$8,749.

I should like to call attention more in detail to the information gathered from these schedules, to consider the income in the families before the accident, the size of the family, ages of the children, and the way they made their new adjustment. The average income in the fifty fatal cases before the accident was \$668.47. Twenty-four occupations were represented. I am inclined to think that the average income is a little high and that the societies arrived at the annual income by multiplying the weekly wage by the number of weeks in a year, consequently not allowing for sickness, shut downs or holidays. The present average income, after an average period of a little more than a year since the accident—the wife and children going to work, taking boarders, renting rooms, etc., was \$238.80 a decrease of 62.4 per cent. The average number in the family was five, wife and four children. The average age of the children was 8 years and 2 months. The average age of the fifty men killed was thirty-four and a half years. In the fifty other accidents where the man was wholly or partially permanently disabled, the recovery was \$8,566, an average of \$178.45 per man. The average income in these families before the accident was \$700; after the accident, \$255 a decrease of 65 per cent.

The societies were asked these additional questions:

First-To state the amount of relief given or obtained by them for the families.

Second-Since relief societies are seldom able to give adequate relief, they were asked what they would consider adequate relief.

I have already indicated that we could not get a definite measure of what the societies actually gave in relief, but we got a more definite reply to the second question, namely, what would be considered adequate relief in these families. The average estimate was \$5.80 a week for each family, which amounts to \$301.60 a year. This, add to the \$238.80 earned by the wife and children, taking boarders, etc., would make an income of \$10.40 a week or \$504.40 a year. Understand that this was simply an estimate of what would be adequate relief and not what the family got.

At Cherry, the question was discussed as to what shrinkage in income might legitimately be allowed for counting out the man's expenses. If we accept \$5.80 as an adequate allowance to supplement each of these one-at-atime accident families, increasing the income to \$539.60 and deduct this from the \$644 which was the average income in the fifty families before the accident, it would make an allowance of \$104 a year for the man, or only about a sixth of the income, on his account. In the discussions of the Cherry cases, it was thought that rather more than one-fourth should be allowed for the man. This would put the family in better financial condition than when the man was alive.

Chapin, in his valuable study, set \$800.00 as the lowest income on which a family could maintain a proper standard in New York city. However, the average income of the working man is much less than \$800.00. The average income at Cherry was \$600.00, and, as we have seen, it was set at \$644.00 in the fifty families we are studying.

The societies, in making their returns, did not indicate during how many years this \$5.80 a week should run. The average period over which the money contributed to the Cherry victims will run is about seven years. If we should accept the Cherry standard of distribution and should run the fifty casual families for seven years, it would amount to \$2,111.20; whereas, the Cherry families will receive a total average of \$1,745.00 of relief contributed, not counting what they received from the company.

I am inclined to think that the minimum compensation for death should be four times the annual earnings of the man, and that this should be paid on a percentage basis to the wife and to each child below working age. In case of total disability, the compensation should be more because the man

is robbed of ability to work and must be maintained.

A car inspector lost his life in a crib fire at Chicago two years and three months ago. He left a wife and three children, aged 7 and 4 and 2 years. He earned \$750.00 a year. The employer offered \$1,500 in settlement as compensation. This offer was not accepted and suit was begun and is still pending.

Had the laws of the following countries been in operation in Illinois the family would have received aid in the amounts given below in the form of annual pensions, except in Great Britain where the amount is a lump sum, providing the widow did not marry and all the children lived to working age:

Austria until youngest child is fifteen\$4,268	23
France until youngest child is fifteen 5,162	
Germany until youngest child is fifteen	
Great Britain three times annual wage	
Hungary until youngest child is sixteen 5,615	06
Italy purchase of annuities until eighteen	0.0
Norway until youngest child is fifteen 4,268	23
Russia until youngest child is fifteen 5,800	0.0

In most of the countries the law determines the maximum annual earnings upon which the percentage of compensation is based. This maximum ranges from \$321.60 in Norway to \$772.50 in Russia. In all of these countries the state guarantees payment. In all cases of fatal accident in these countries, except Austria, the insurance premiums are carried entirely by the employer. In Austria the employé contributes one-tenth to the fund and the employer nine-tenths.

Growing out of the study of these cases there are certain observations to be made. The compensation to the victims of fifty fatal accidents ranged from \$3,000.00 to nothing. In two cases \$7,000.00 each was awarded, but they were appealed from court to court and the victims finally got nothing. In one of the permanent disability cases, a lower court awarded \$22,500.00. After the same exhausting routine of going from court to court, the case was thrown out and this family got nothing.

The uncertainty and delay had a most demoralizing effect both morally and physically. Demoralization and general deterioration were returned as a mong the social consequences in many of these cases. These people were in suspense, setting their expectations on sums of money that would make them independent; huge fortunes in their eyes, and after living in this anticipation, sometimes adopting a scale of living accordingly so far as they could, they were finally disappointed and got nothing.

Some of these excessive awards were an injustice to the employer, but when they were reversed and nothing was received, it certainly was an injustice to the employe, and all the time this sort of thing engenders bad

feeling between employer and employe.

Another thing which should be considered in this connection is the present wasteful expenditure in our method of handling these matters. George M. Gillette, of Minnesota, in an address before the Commercial Association of Chicago stated that the manufacturing and business concerns of this country have in the last five years paid to casualty companies in premiums \$95,000,000.00 Less than \$45,000,000.00 has gone in settlement of damages, and again, less than half of this \$45,000,000.00 has reached injured persons, going in lawyers' fees, court costs, etc., making not more than 20 per cent or 30 per cent of the whole sum, the fellow servant and contributory negligence doctrines being in large measure responsible for adverse judgment.

This enormous expense has, of course, been added to the cost of the manufactured product, the same as other expenses incident to the manufacture of commodities. The community has not only paid this \$95,000,000.00 but it has in large measure taken care of the people who were injured and of their dependent families, thus paying the bill twice. If this matter could be taken from the war basis on which it rests, and could be so adjusted that injured people would receive compensation that was just and fair for their injuries, and this were paid on a pension basis promptly when the family was in greatest need, and if, as would happen, accidents were prevented in greater degree than they are at present, because insurance would be affected by reduction in the number of accidents, it seems altogether likely that the money which employing concerns are already expending would go a long way to meet the needs of a just, fair and adequate compensation.

The consequences of occupational diseases are just as disastrous to the family. The causes are more subtle and elusive. It is easy to determine where and how a man lost an arm or a leg, an eye or his head; it is more difficult to determine where he picked up tuberculosis germs or just when and how bad sanitation, poor ventilation, the inhalation of dust, bad working conditions generally, wore away physical resistance and laid the founda-

tion of physical undoing.

The numbers and consequences of these preventable occupational diseases are doubtless greater and more disastrous than those resulting from accident. It is intrinsically as inappropriate that charity, either private or public, should be relied upon to take these consequences as for the same sources to undertake the pensioning of the soldiers of the Mexican, Civil or Spanish wars. What the victims of these accidents and diseases want is just what charity workers would want under similar circumstances—that all preventable accidents and preventable diseases should be prevented; that accidents and diseases which must necessarily befall in the course of industrial service, should be taken care of; broadly, by those who are benefitted by that service, just as the nation at large is a debtor to the soldier who sacrifices health or life, and participates as a nation in movements of amelioration for him and those dependent upon him.

MINE MANAGERS, HOISTING ENGINEERS AND MINE EXAMINERS

TO WHOM CERTIFICATES WERE ISSUED BY THE STATE MINING BOARD DURING THE YEAR ENDING DEC. 31, 1910.

MINE MANAGERS HOLDING FIRST CLASS CERTIFICATES ISSUED DURING THE YEAR 1910.

Name.	Postoffice.	Name.	Postoffice.	
Anderson, Charles E	Oakwood	Jones, E. P. Jourdain, Raymond, Jr	Sparta	
Anderson, James S	Trenton	Jourdain, Raymond, Jr	Pawnee	
Atkinson, L. Clyde	Springheld	Knies, Henry, Jr	Breese	
Barrowman, Andrew	Spring Valley			
Bauer, John H	Freeburg	McCarnes, Henry		
Bennett, William		McReaken, Charles W McWilliams, John		
Bernthal, Carl S Bevan, William		Malcoe, Frank		
Brown, John F		Martin, Sherman		
Bravfield, Henry	Carterville	Morgan, W. L	Belleville	
Burke, John	Bush	Munster, James	Eldorado	
Collins, Frank W	Roanoke	O'Connor, Henry	Spring Valley	
Davis, James M Donnelly, Andrew	Springfield LaSalle	Palecek, William Pettegrew, Alexander Pulliam, Benjamin	Maryville	
Eddy, George Edmiston, Robert	CherryGillespie	Quigley, Joseph	Canton	
Farnworth, Nathaniel Ford, John	Riverton	Rossaw, J. P	Duquoin	
Frew, Thomas	Staunton			
		Schroeder, Louis	Cuba	
Gibbons, Foster	Farmington	Sergeant, J. R	Harrisburg	
menemousen, J. R	East reorla	Vacca, Joseph	Collinsville	
Heck, Matt Hoye, James P	New Baden	Verdeber, John	Lincoln	
Loye, James I	oueator	Waite, Walter	Cherry	
Jones, David L., Jr Jones, David W	Taylorville	Westerby, James Wolf, John D.	Farmington	

MINE MANAGERS HOLDING SECOND CLASS CERTIFICATES ISSUED DURING THE YEAR 1910.

Name.	Postoffice.	Name.	Postoffice.	
Akers, Max. V	Tiskelwa	Lane, Frank	Cambridge	
	Farmington	Lavill, L. M.	Wyoming	
Appelby, Robert	East Peoria	Lee, William B	Inava	
Appendy, Itober C	Hast I cornaction	Lippert, Fred	Millstadt	
Baker, Frank	Kingston Mines	Luman, George	Moro	
	Rushville	Duman, George	Moro	
	Shelbyville	McLaughiln, H. T	Winchester	
	Sparta	Martenes, M	East Paoria	
	Utica	Martin, Jake	Darmstadt	
Brady, James C	Wyoming	Manck, Albert.	Danville	
Bybee, J. C.	Maquoin	Mauck, J. W.	do	
5,500,5.0	maquom	Meyers, Peter	Bethetle	
Cassel, A. H.	Clayton	Mitchell, Wesley	Greenfield	
Crane, J. N.	Chesterfield	Morris, James I	Exeter	
	Sparland	morris, vames 1	Dactor	
/cc us, o onn	D pairana	Pearson, J. H	Henry	
Dawson, J. E	Campbell Hill	1 6013011, 0. 11	nem y	
Deer, Thomas		Rentfro, F. E	Crah Orchard	
Derry, John	Springfield	Robinson, C. D.	Stanfort	
Dollins, Charles	Shelbywille	Roseman, Charles	Carbon Cliff	
bonnis, Charles	Bhorby vinciation	Trobolium, Charles	Curbon Cimirri	
Ewing, Grant	Astorio	Sharp, Harry	Victoria	
Dwing, Grant	21300116	Sheets, W. A.	London Mills	
Farrell, Larry	Streetor	Spaulding, J. H.		
Luncii, Luni j	Delicatoriiiiiiiiiiiiiiiiiiiiiiiiiiiiiiiiiiii	Sternaman, William	Springfield	
Golden, J	Kowenee	Stretch, Tobias	Shelbyville	
Guckes, Jacob	Millstadt	Stron, Eric	Victoria	
Guy, James M	Colchester	Stron, Dite	* 1000114111111111111	
day, banks m	Colchesterrin	Taylor, Charles	Exeter	
Henderson, Chaffin	Victoria	Thompson, J. R.		
Hoadley, William J	Coal Valley	I nompoon, at recession	Trabit vinc : : : : : : :	
Hughes, Ed.	Sweetwater	Vittorel, Frank	Westville	
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isreal, B. F	Roodhouse	Wages Amos	Canton	
isical, D. F	1000dH0dSc	Wall, T. J.		
	Herrin	Wantling, George	Peoria	
forden E M	rioiiii	Weaver, Prentis	Fairview	
Jordan, E. M				
*	Monmouth	Westerby James	Farmington	
Jordan, E. M	Monmouth	Westerby, James	Farmington	
Kennedy, F. R Kirby, Mike	Campbell Hill	Westerby, James Wood, Charles E	Danville	
Kennedy, F. R	Campbell Hill	Westerby, James	Danville	

HOISTING ENGINEERS HOLDING CERTIFICATES ISSUED DURING THE YEAR 1910.

Name.	Postoffice.	Name.	Postoffice.
Adams, John	Wasson	Koenig, Andrew	LaSalle
Allan, David		account, and the contract of t	- Indicate of the state of the
indit, Davider	Da Sanciiiiiiiiiiiiiiiiiiiiiiiiiiiiiiiiiiii	Lancaster, Charles A	Springfield
Ball, Arthur		Ludewick, Lester M	Witt
Barlow, E. S			10.
Barringer, Willis		McCarnes, John	Marissa
Berry, George		McLain, James	Equality Braidwood
Boyer, Frank Burke, Julius		Manard, Clarence	Staunton
burke, Junus	Cimora	Mason, Walter	Edwardsville
Carr, James T	Peru	Meissner, Louis ()	Riverton
Coker, Arthur H		Miller, George A	Christopher
Collar, Edward W	Belleville		DeSoto
Coughlin, Ed	La Salle		Willisville
Coughlin, Thomas	do	Murphy, John A	Johnston City
Covington, Harry	Blue Mound	37	T314 4-
The same and the s	Eldorado	Newman, George	Eldorado
Foster, Martin	Eldorado	Ollar, Milo	Carterville
Garlits, Jackson	Mechanicsburg	Opperkew, John F	Minok
Gergen, Edward	Pinckneyville	Opperkew, sonn r	MILION
Gibson, Ernest		Paden, Fred L	Centralia
Goodin, Roy		Payton, J. H	Springfield
Gordon, Ralph L	Cambridge		Harrisburg
Gordon, William A	O'Fallon	Pulley, Ernest	Marion
Griffith, Lee		71.11.71	OUT II
Grobbling, John	Benld	Ritchie, John A	O'Fallon
Hadfield, Walter	Carterville	Sawers, William	Coal City
Haddican, Ed		Stuart, William	Spring Valley
Hamilton, Andrew	Spring Valley		
Hampton, H. A		Tori, Frank	Springfield
Harper, Henry	Harrisburg	Towles, Arthur C	Harrisburg
Harris, Thomas			do
Harris, W. G		Tramor, William	Springfield
Hexter, John A		Walker, George A	Staunton
Hill, Roy Hopkins, Walter			Dunfermline
Howard, Luther	do		Christopher
Hummel, Emanuel, Jr		,	_
Hummel, Mike, Jr		Young, A. E	do
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Johnson, Edward M	West Frankfort	Zierjack, Walter F	Fairmount
Johnson, Eli. W	Herrin		
Johnson, William Jones, Benjamin	Pooria		
Jones, Denjamin	1 00114		

MINE EXAMINERS HOLDING CERTIFICATES ISSUED DURING THE YEAR 1910.

Name.	Postoffice.	Name.	Postoffice
Adams, Will	Herrin	Kaepple, Rudoplh	Peoria
Adams William	Staunton	Kuepper, Hubert A	Gillespie
Alcon D D	Fileville	reactively reasons in the contractive	o diespie.
Appanaitis, Andrew	Waetvilla	Land, John	West Frankfort
Aufdenspring, William	Middleterm	Larrison William H	Harrisburg
Aundenspring, william	Middletown	Lowless Thomas	Springfield
D-11 T-1	IT a Calla	Larrison, William H Lawless, Thomas Leight, Albert S	Panton
Ball, John	LaSalle	Ludwig, William	Benton Westville
Ball, Reuben	Spring Valley	Ludwig, william	westville
Barrowman, Andrew	Spring valley	MaManana Tanana	A
D dnar, John	Staunton	McMannus, James	Assumption
Bennett, William	Pawnee	McNeil, Charles	Harrisburg
Berry, W. T	Staunton	Maitland, J. W	Herrin
Berry, W. T	Springfield	Martin, Mathew	LaSalle
Brayfield, HarmanBrown, Andrew M., JrBrown, Henry L	Duquoin	Martin, Sherman	Harrisburg
Brown, Andrew M., Jr	Braidwood	Meacham, H. A	do
Brown, Henry L	Cutler	Medill, William	West Frankfort
		Miller, O. D. Morgan, Edward	Catlin
Cane, Samuel	Eldorado	Morgan, Edward	Sherrard
Cape, Samuel Catheart, William, J	Harrisburg	,	
Clark, Brooks	Carterville	Nelson, Robert	Springfield
Clark, W. R.	Westville	Nester, Max	Ladd
Connors, William	Formorevillo	Noel, John T.	Bartonville
Cools Wolfer	Howaighame	roei, somi i	Dar ton vinc
Cook, Walter Cruse, Robert R	Danwar	O'Leary, Thomas	Marquette
Cruse, Robert R	Charland	O Leary, Thomas	marquette
Cusnning, Frank	Sparianu	Donkon W. H.	Connow
D 1 101 1	15	Parker, W. H.	Sesser
Daly, Michael	Maryville	Parkinson, Benj	Rutiand
Donnelly, James	LaSalle	Passent, W. C., Jr	Ellisville
Donnelly, William Drui, Nicholas Duck, William	do Worden	Passent, W. C., Jr. Payne, William Peacock, Thomas	Decatur
Drui, Nicholas	Worden	Peacock, Thomas	Thayer
Duck, William	Pana	Peddie, Fred	Pawnee
·		Peterson, Ira	Anchor
Edmiston, Robert	Gillespie	Pricco, Andrew	Spring Valley
Edmunds, Samuel	Staunton	1	
Edwards, John	Eldorado	Reeland, John	do
Evans, Thomas	Lincoln	Rees, Edwin	Gillespie
,		Rees George S	Spring Valley
Falcetti, Walter J. Finley, Charles	Virden	Reynolds, William Rogers, Thomas Rathwell, John P	Spring Valley Girard
Finley Charles	Decatur	Rogers, Thomas	LaSalle
Flannigan Goorge W	Decatur	Rathwell John P	Peoria
Floquet Loop I	Machanicchurg	Russell, W. R.	West Frankfort
Flannigan, George W Floquet, Leon J Ford, Thomas J	Springfield		
Freeman, Fred	Pittsburg	Sarby William	LaSalle
r reeman, r red	Fittsburg	Sabrooder Louis F	Cuba
Clasten Incanh	Polloville	Saxby, William Schroeder, Louis F Sergeant, James R Simpson, John Smith, Charles H Smith, Edwards Smith, William	Cuba St. David
Gierten, JosephGilmour, William	Conner VIIIe	Cimpson John	Dalzell
Gilmour, William	Sesser	Simpson, John	Essex
Gaff. John.	. Harrisburg	Smith, Charles H	Trindon
Gasnell, Steve	Benton	Smith, Edwards	Virden
Grady, Nicholas	. Marquette	Smith, William	Herrin
Grumley, Dennis	Westville	Starkey, C. H. Stone, Isaac E.	
		Stone, Isaac E	Farmington
Hamilton, Laucelot	Westville	Storme, Luther	Reeves
Hanley, William T	Springfield	Strebel, John	Virden
Hannia Lonothon	Tilden	1	
	Witt	Thomas, John P	Carterville
Haywood, William T		Tracy, John J	Carbon Hill
Hamilton, Laucelot			
		Tracy, John J	L .
Javne, Richard	Cuba		Hillshoro
Javne, Richard	Cuba	Welsh, James	Hillsboro
	Cuba	Welsh, James	Catlin
Jayne, Richard	CubaSpartaPawnee	Welsh, James	Catlin
Jayne, Richard	CubaSpartaPawnee	Welsh, James Williamson, M Will, Stanley	Catlin Westville
Jayne, Richard	Cuba Sparta Pawnee Maryville Virden	Welsh, James	Catlin Westville

LAWS COVERING ACCIDENTS AND EMPLOY-ERS' LIABILITY.

BY DAVID ROSS, SECRETARY OF LABOR STATISTICS OF ILLINOIS.

[This address by Mr. Ross was delivered before the American Mining Congress at Goldfield, Nev., September 27.—Editor.]

While the great loss of human life consequent upon the operation of modern industry makes constant and proper appeals to the sympathetic, our treatment of the legitimate claims of injured workmen should be uninfluenced and as free as possible from considerations inspired by sentiment alone.

The wonderful powers which the genius of men have developed in the myriad forms of productive machinery has modified, if it has not entirely removed old time notions, and practically destroyed that sense of personal relation and responsibility which obtained during the earlier and simpler form of industry. To those holding the conviction that most accidents are in their nature inevitable, the necessary and expected results of trade hazards, the subject is one of most serious import demanding the exercise of the best judgment we can summon.

Unfortunafely, so far as the present statistics on the subject are concerned, we have no definite or reliable information; particularly is this true regarding the class of non-fatal injuries, which makes it difficult if not impossible to estimate what protection against that form of loss would cost. Public attention has, however, been awakened on this issue, and as a result of inquiries and investigations now in progress by the Federal and many state governments full and complete data will soon be available upon which systems of insurance and compensation can be safely and scientifically constructed.

From our present knowledge we are permitted to form a fairly correct estimate of the event of the losses and suffering which the growing business and industrial interests of the country impose.

Furthermore, these losses in the extra hazardous occupations in spite of the enthusiastic claims of inventors whose patented devices are warranted to prevent accidents, increase and decline in nearly exact proportion to the number of men employed and the amount of work they perform.

Those who may be inclined to doubt this declaration, should read again the story of mining and railway development during the past quarter of a century, and note the close and persistent relationship between the number of casualties and the general volume of business, and this too, notwithstanding a stricter enforcement of regulations, the installation of various safety appliances, and the service of more capable and experienced officials and employés.

ACCIDENTS ARE INEVITABLE.

The alleged carelessness, ignorance, or incompetency of men, their pretended love of danger, if not their ambition to be killed or maimed has done duty long enough as an excuse for the cause of accidents and we cannot better begin our treatment of this question than by divorcing ourselves from such erroneous impressions, and accept the fact that regardless of the elements of care and capacity, accidents, particularly where machinery is employed on a large scale, will continue to occur. The fact of the accident itself is of greater importance to society than the cause of it, and our plain duty in the premises is to employ some of the time we have wasted in efforts to locate legal responsibility in devising plans to meet such occurrences in a manly business way. Our theorists who are proof against any knowledge of human affairs, tell us that if we remove the cause, the effects will not disturb us. Practical men have been struggling with this problem for generations without much success; theorists will not even make an effort. There is but one effective way to prevent accidents, that is to stop working. We are left without a choice in the matter and must deal with the situation as we find it, not as we would wish it to be.

From the data at hand relating to the occurrence of accidents of different kinds, Mr. F. L. Hoffman, of New York, one of the most studious and careful statisticians of the country, in a contribution to the September, 1908, bulletin of the Bureau of Labor estimates that the total number of fatal accidents in the United States last year was between 30,000 and 35,000. This conclusion is based on the population census of 1900 and the number of people fifteen years of age and over, engaged in gainful occupations.

The report from which these figures are taken make no discrimination between accidents of a general character and those directly resulting from employment. Mr. Hoffman's conclusion is that "one-half of the accidents are more or less the immediate result of dangerous industries or trades." Out of an industrial population of nearly 30,000,000 the death toll last year

was approximately 18,000.

Our triple interests, transportation, mining and manufacturing, represent in the order named the most hazardous occupations and make up the principal list of fatalities. Under the provisions of the British workmen's compensation act, which requires in the case of death from accident a consideration equal to the total of three years average earnings, our financial liability for the year 1907, which in respect to the number of accidents and also the business of the country exceeded all former records, totalled less than \$22,000,000. This is but a small part of certain individual fortunes in our day, and insignificant when compared with the enormous wealth of the nation which the toil of our workmen has helped to create.

Aside from railway statistics concerning accidents, we have nothing authentic as applying to the entire country. In the State of Illinois, which I have the honor to represent here, the mine inspection service, through the Bureau of Labor, has been collecting and publishing accident and other statistics for the past thirty years. The published reports relating to casualties in that industry are fairly reliable, being limited to accidents of a serious nature causing a loss of thirty or more days' time. The same is true of accidents in connection with manufacturing, which, under a law passed two years ago, we are also required to receive and report. Taking the per cent of accidents of which we have a record in mining, manufacturing and transportation and applying them to those industries generally gives us the following approximate results:

Industry.	Number employed.	Total annual wages.	Value of product.	Average yearly earnings.
Coal mining	586,801	\$ 368,832,322	\$ 614,798,898	\$629
Manufacturing	4,244,538	2,266,273,319	14,802,147,087	534
Transportation	1,403,840	882,726,920	2,589,105,578	629
Total	6,235,179	\$3,517,832,561	\$18,006,051,563	\$564

	Number killed.	Number injured.
Coal mining	2,746	10,600
Manufacturing	900	8,400
Transportation	4,534	87,644
Total	8,180	106,644

We have a record here of the industries named of approximately the number employed, annual wages, value of product, average yearly earnings, number killed, and number injured; taking these figures as substantially correct (and they have been collected from reports of the census of the Department of Labor and Commerce, and the estimates of experts) the following indicates what part of the wealth produced through these agencies would be required to pay an average of three years' wages to the heirs or dependents of those killed and compensation at the rate of one-half wages to those injured losing an average of sixty days' time each.

Industry.	Total amount required to pay \$2,000 for each fatal accident.	Total amount required to pay ½ wages for 2 months idleness.	Total amount required to pay for killed and injured.
Coal mining.	\$5,492,000	\$ 551,200	\$ 6,043,200
Manufacturing	1,800,000	378,000	2,178,000
Transportation	9,068,000	4,557,488	13,625,488
Total	\$16,360,000	\$5,486,688	\$21,846,688

Industry.	Per cent of total value of product to pay for killed.	Per cent of total value of product to pay to injured.	Per cent of total value of product to pay for both killed and injured.
Coal mining.	0.89	0.09	0.98
Manufacturing.	0.012	0.003	0.015
Transportation	0.35	0.18	0.53
Total	0.09	0.03	0.12

The addition of less than one per cent to the valuation of the coal product of the country would furnish sufficient revenue, including the cost of administration, to cover the claims of the killed and injured according to the terms of the British compensation law. While twelve hundredths of one per cent would perform a like service in the case of all casualties occurring in connection with mining, manufacturing and transportation in the United States; surely the "ultimate consumer," whose welfare everyone is eager to protect, would not object to this very slight increase if assured of the purpose for which it was made.

Accidents represent so much loss suffered as an incident of the prosecution of industry, and should be provided for in the same manner as other necessary expenses; the labor of men is as essential to the success of an industrial enterprise as that of machinery and this plan of management, recognized by every civilized government, would in this respect, put the men on an equality with the machine and require that the cost of a broken bone or other injury, like a broken machine, should be classified in the category of ligitimate operating expenses and properly listed as a charge against the industry to be recouped, as other losses, from the profits of the business. Aside from the principle there is a certainty about this method which should command the indorsement of every employer of labor.

In the more dangerous trades, the occurrence of accidents are so regular, whether figured on the basis of men employed or work performed, as to make them a definite insurance risk, so that men investing their capital would know in advance, what losses under this plan it would be necessary to anticipate and provide for, the difference being that instead of distributing vast and varying sums in payment of court costs and attorney fees, under the prevailing system, specific amounts probably less in the aggregate, would be paid directly those who are most entitled to it. A consideration of the subject from this view point must necessarily reject the proposition that any part of the money needed to liquidate such claims should be deducted from wages. While the suggestion that a fund be created to which employers and employés contribute, is a decided advance over the unbusinesslike method now obtaining, simple justice requires that the burden be borne entirely by the trade or industry; that the cost of such protection be charged against the business and that no portion of it should be extracted from the wages of workingmen.

COMPARISON OF RESULTS.

Economic laws are universal in their operation. England and other European countries have in their turn met the same difficulties and in a way surmounted them.

Industrial progress has been much more rapid here than there, and problems requiring centuries in other countries to develop, have been pressed

upon us within the short period of a generation.

Following the rise of industry in all lands has come the demand for the enactment of legislation prescribing the liability and defining the duty of master and servant: Our experience in all respects has been duplicated abroad. It would seem that we might "cross lots" and adopt outright, the plans which their experience has proved to be the best, but that is not the nation's way, and destiny demands that we must struggle with these questions in the step by step order in which they present themselves.

So it is not strange that at this epoch in our life we should find the labor unions insisting upon more stringent laws covering the liability of employers. It is not enough that the common law indicates the duty of masters, the relationship must be still clearer defined by specific statute and in the clash of each interest seeking immunity, the war proceeds. As the interests of property control in nearly all law making bodies the demands of workers for remedial legislation in this respect, has, in most instances, been denied, particularly in our local or state assemblies where such legislation would directly affect private industry.

In those countries where strict employers' liability laws have been enacted, the working-class interests realized that the only real privilege they had won was the opportunity for a law suit, a contest in which they were again placed at a serious disadvantage with rich, unscrupulous employers; with such laws in operation here, the disadvantage would be greater because of the expense, the innumerable appeals and insufferable delays which it is seemingly the purpose of our present laws to promote and which has recently called forth the severe and just criticisms of President Taft.

Legislation relating to the liability of employers contemplates the recovery of damages for injuries resulting from negligence. Under our system of judicial procedure the burden of proving negligence rests upon the plaintiff and the chief difficulty has been to produce the evidence.

DIFFICULTIES IN THE WAY.

There are so many accidents of such a nature where it is impossible to show responsibility on either side, that recovery is out of the question where the issue is contested, besides as a result of the conditions requiring such laws, there has grown up a system of judicial law such as the relationship of the plaintiff to other workmen, known as the rule of fellow servant or co-employment; the rule of contributory negligence; the doctrine of assumption of risk and other vague and mysterious legal speculations that operate to defeat just and meritorious claims.

That most dignified legal fiction known as the fellow-servant rule which has been made to do duty in such a tragic manner, originated in England in 1837, and was repudiated there first in a modified form in the earlier liability laws, and later absolutely in the compensation acts, is still the law in this country except where it has been modified or repealed by statute. While time will not permit discussion of the question, it should be said that the rule is unfair, indefensible and ought to be abrogated. criminates in favor of the strong and against the weak. The little master doing his own work is held responsible while the large employer by delegating authority avoids liability. It gives to strangers rights which it denies to workmen. It was formulated to cover a domestic case and its greatest injustice is expressed in the continued attempt to apply it to the changed industrial conditions of our time. There is no other single rule of law that has operated so harshly or that has contributed so much to confirm the public suspicion that its origin and application was and is inspired by a judicial purpose to protect the wealthy against the workers. If it could be put in the form of a law there is not a court in the country that would not condemn it as the worst possible species of class legislation. If the government of our country had the power of foreign governments to regulate the conditions of private industry, this and other objectionable rules would cease to operate. To its credit be it said, that in respect to interests over which it has control like that of interstate railways, manufacturing and other work performed by the United States government or its agents, the doctrine has been officially and effectively abandoned.

A law acceptable to the government ought to be satisfactory to private employers. In this as in other countries partly as a consequence of the enactment of employers' liability laws, numerous casualty companies were organized for the purpose of protecting employers against suits instituted to recover damages for injuries. One is the necessary complement of the other and it is questionable notwithstanding the expenditure of vast sums

of money whether our last condition is not worse than the first.

COMPLAINTS OF EMPLOYERS.

Employers complain and with some justice, that legislatures influenced by the love or fear of trade unions are continually enacting laws against their interests; that the judgment of juries softened by the tears of tenderhearted attorneys return verdict in total disregard of justice, conditioned more upon the amount the defendant can afford to pay than the loss sustained by the injured person; that unscrupulous lawyers take advantage of the situation and for a fee (contingent on the verdict) encourage the prosecution of such claims; and, that as a means of preserving their credit and avoiding bankruptcy they are compelled to pay large premiums to casualty companies for only partial protection.

Its effects have been equally objectionable to the wage earners. They contend that they are denied speedy trials in court; that there is no assurance as to the time when such suits will be terminated (one notable case against a great corporation continued for twenty-one years); that the ordinary workman has little, if any, chance against cunning claim agents, expert attorneys of employers and insurance companies; that the suit is

appealed from court to court and if fortunate enough to ultimately win out, after years of waiting and suffering, the costs and contingent fees absorb most of the award.

It is everywhere admitted that in respect to matters in controversy the prospects for a satisfactory adjustment are better where the parties in interest deal directly with each other than where the situation is complicated by the presence of an outside or foreign interest, particularly in legal affairs where a corps of attorneys are regularly employed. So persistent have certain casualty companies become in this respect that, in the case of one Illinois corporation, its attorneys were notified that if they did not stop the contest and make settlement, it would terminate its business with the company. Under the chaotic conditions of our law and the many points and rulings on which a technical claim can be defeated, there is a constant inducement to litigation where the claimant declines to accept in full satisfaction a proffered sum equal to what it might cost to contest it. In negotiations for a settlement the actual sight of money has a potent effect and many enterprising agents have secured the coveted signature to a release by exhibiting before the vision of the injured person, great piles of bills, all however, of unitarian denominations, and representing but little value. This is but one of the many clever tricks turned by agents to aid their companies in avoiding adequate payments.

INDUSTRIAL INSURANCE.

Prof. C. R. Henderson, of the Chicago University, in his recent work on "Industrial Insurance," states that in one year fifteen companies in Illinois collected in premiums \$1,825,467,57 and paid claims to the amount of \$867,940.95. He explains that it must not be inferred from these figures that this class of insurance companies are earning inordinate profits. It is claimed that the rate of commission alone for securing business, averages twenty-five or thirty per cent, and that the addition of other items such as salaries and expenses of special agents, rents, clerk hire, surveys and inspections, would average one-half the premiums leaving the margin of profit about ten per cent of the receipts.

So far as insurance companies are concerned the extent of their profits, whether large or small, is immaterial; the facts are that the system fails to meet the requirements of the occasion; that it is maintained at enormous cost to the industry without adequate benefits to the interests directly involved. It would seem that an institution which on the one hand fails to give complete protection to the employer and on the other applies the greater part of its premiums in an effort to defeat the claims of employés is absolutely without defense, and is entirely out of place in a situation where pressing social and economic problems demand complete attention. Beyond the premiums paid to registered insurance companies we have no means of knowing what such administration costs, and that is but part of the total expenditures as many employers have no insurance, preferring to let their own attorneys attend to such work. It is therefore impossible to institute anything like a correct comparison, without an actual trial, of the expense of continuing present plans with that of the proposition to compensate accidents according to a definite schedule. Whether the sum were less or more, there would under the proposed system be the satisfaction that whatever was disbursed would be distributed in a way that would render the greatest and promptest relief to the unfortunate victims of industry. It might be asked if the adoption here of a measure similar to the workmen's compensation act of Great Britain would end all litigation so far as accidents are concerned. No. For the reason that the right to bring action in court to recover damages cannot be abridged, but the result here as in other countries, would be to accept without litigation a specific sum rather than take chances on the uncertain results of a law suit and in consequence, but very few injury claims would be contested.

It would be better for every one if this reform could be brought about through the medium of trade agreements, but, on account of the limited number who are affiliated with labor unions and organizations of employers, this is impossible and we must look to the compelling influence of general law to accomplish it. Some of the states, notably Wisconsin, have now under consideration, a plan of this character, and as she has taken many progressive steps in recent years, may be the first to claim the distinction of adopting it. While the fact that we have so many separate sovereignties in this republic may retard its introduction as a measure of law, many encouraging examples have been offered by the National Government so far as its sphere extends, besides the attitude of thinking men and the present protective plans of many individual and great corporate employers are paying the way for the coming change, which in dealing with the problems of men killed and injured, while in the line of their employment, will substitute for the legal idea of negligence, the more humane principle of compensation.







